TENDER DOCUMENT

FOR

Distribution Network for Gaya Division (Part 1 of 2) of Right Main Canal (RMC), Bihar Portion under North Koel Reservoir Project, Jharkhand and Bihar

Estimated Cost (Rs. 73.96 Crores)

TENDER NO: WAP/NK/RMC/DIST/GAYA/P1/2025

TENDER DRAWINGS

WAPCOS

(भारत सरकार का उपक्रम–जल शक्ति मंत्रालय)

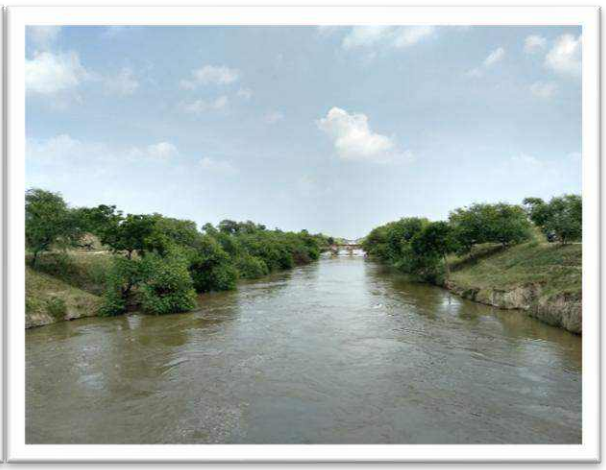
(A Government of India Undertaking-Ministry of Jal Shakti)

NORTH KOEL RESERVOIR PROJECT

Completion of Balance Works of North Koel Reservoir Project

DRAWING REPORT – BHARTIPUR MINOR (OFFTAKING FROM RIGHT MAIN CANAL AT 101.90 KM)







WAPCOS LIMITED

(GOVT. OF INDIA UNDERTAKING)

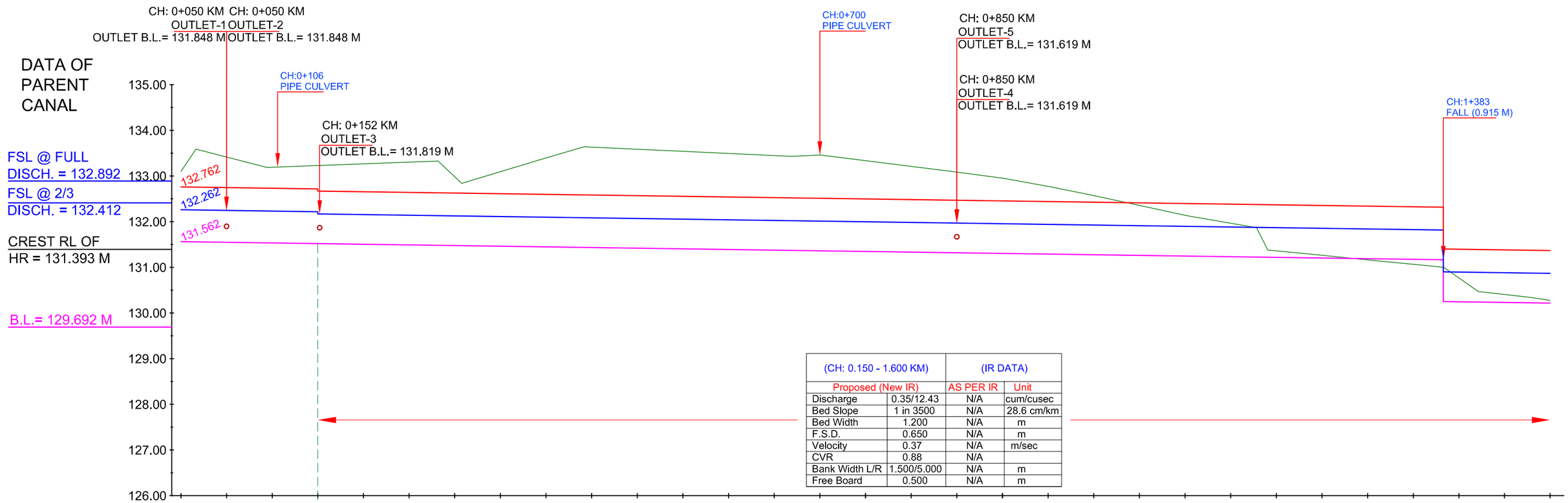
76- C SECTOR-18 INDUSTRIAL AREA, GURUGRAM-122015 (HARYANA)

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L-SECTION

L- SECTION OF BHARTIPUR MINOR
(OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
FROM CH 0+000 TO 1+500

(CH: 0.000 - 0.150 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.46/16.25	N/A	cum/cusec
Bed Slope	1 in 3500	N/A	28.6 cm/km
Bed Width	1.350	N/A	m
F.S.D.	0.700	N/A	m
Velocity	0.39	N/A	m/sec
CVR	0.89	N/A	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	N/A	m



(CH: 0.150 - 1.600 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.35/12.43	N/A	cum/cusec
Bed Slope	1 in 3500	N/A	28.6 cm/km
Bed Width	1.200	N/A	m
F.S.D.	0.650	N/A	m
Velocity	0.37	N/A	m/sec
CVR	0.88	N/A	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	N/A	m

		0+000	0+050	0+100	0+150	0+200	0+250	0+300	0+350	0+400	0+450	0+500	0+550	0+600	0+650	0+700	0+750	0+800	0+850	0+900	0+950	1+000	1+050	1+100	1+150	1+200	1+250	1+300	1+350	1+400	1+450	1+500
DESIGN DATA	TOP OF BANK LEVEL	132.762	132.748	132.733	132.719	132.669	132.655	132.641	132.626	132.612	132.598	132.583	132.569	132.555	132.541	132.526	132.512	132.498	132.483	132.469	132.455	132.441	132.426	132.412	132.398	132.383	132.369	132.355	132.341	132.326	132.317	131.383	131.369
	F.S.L.	132.262	132.248	132.233	132.219	132.169	132.155	132.141	132.126	132.112	132.098	132.083	132.069	132.055	132.041	132.026	132.012	131.998	131.983	131.969	131.955	131.941	131.926	131.912	131.898	131.883	131.869	131.855	131.841	131.826	131.817	130.883	130.869
	Proposed Bed Level	131.562	131.548	131.533	131.519	131.505	131.491	131.476	131.462	131.448	131.433	131.419	131.405	131.391	131.376	131.362	131.348	131.333	131.319	131.305	131.291	131.276	131.262	131.248	131.233	131.219	131.205	131.191	131.176	131.167	130.252	130.233	130.219
EXISTING DATA	Bed Level																														131.402		
	TOP OF BANK LEVEL																														131.398		
	NSL	133.100	133.590		133.190				133.330	132.840	133.000		133.330		133.640		133.590	133.550		133.490		133.430	133.460				133.100		132.950	132.770	132.580	132.340	132.130		131.870	131.380		131.270		131.140		131.030	131.000		130.470		130.340		
	Chainage IN KM	0+000	0+050	0+100	0+150	0+200	0+250	0+300	0+350	0+400	0+450	0+500	0+550	0+600	0+650	0+700	0+750	0+800	0+850	0+900	0+950	1+000	1+050	1+100	1+150	1+200	1+250	1+300	1+350	1+400	1+450	1+500

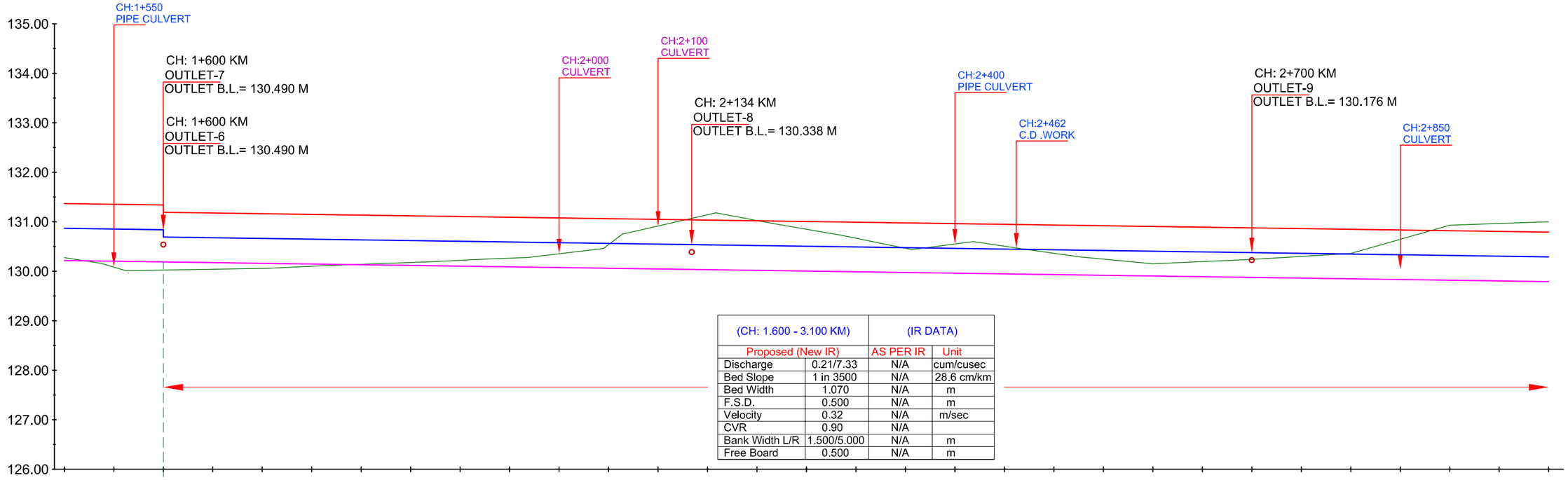
LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF BHARTIPUR MINOR (OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/ LSEC- 01 of 03

L- SECTION OF BHARTIPUR MINOR
(OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
FROM CH 1+500 TO 3+000



(CH: 1.600 - 3.100 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.21/7.33	N/A	cum/cusec
Bed Slope	1 in 3500	N/A	28.6 cm/km
Bed Width	1.070	N/A	m
F.S.D.	0.500	N/A	m
Velocity	0.32	N/A	m/sec
CVR	0.90	N/A	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	N/A	m

		1+500	1+550	1+600	1+650	1+700	1+750	1+800	1+850	1+900	1+950	2+000	2+050	2+100	2+150	2+200	2+250	2+300	2+350	2+400	2+450	2+500	2+550	2+600	2+650	2+700	2+750	2+800	2+850	2+900	2+950	3+000
DESIGN DATA	TOP OF BANK LEVEL	131.369	131.355	131.340	131.176	131.162	131.148	131.133	131.119	131.105	131.090	131.076	131.062	131.048	131.033	131.019	131.005	130.990	130.976	130.962	130.948	130.933	130.919	130.905	130.890	130.876	130.862	130.848	130.833	130.819	130.805	130.790
	F.S.L.	130.869	130.855	130.840	130.676	130.662	130.648	130.633	130.619	130.605	130.590	130.576	130.562	130.548	130.533	130.519	130.505	130.490	130.476	130.462	130.448	130.433	130.419	130.405	130.390	130.376	130.362	130.348	130.333	130.319	130.305	130.290
	Proposed Bed Level	130.219	130.205	130.190	130.176	130.162	130.148	130.133	130.119	130.105	130.090	130.076	130.062	130.048	130.033	130.019	130.005	129.990	129.976	129.962	129.948	129.933	129.919	129.905	129.890	129.876	129.862	129.848	129.833	129.819	129.805	129.790
EXISTING DATA	Bed Level																															
	TOP OF BANK LEVEL																															
	NSL		130.160	130.010			130.060	130.110	130.150	130.190	130.240	130.280		130.460	130.750		131.180	130.970		130.730	130.440	130.600	130.450	130.290		130.151		130.239		130.361		130.931		131.002
	Chainage IN KM	1+500	1+550	1+600	1+650	1+700	1+750	1+800	1+850	1+900	1+950	2+000	2+050	2+100	2+150	2+200	2+250	2+300	2+350	2+400	2+450	2+500	2+550	2+600	2+650	2+700	2+750	2+800	2+850	2+900	2+950	3+000

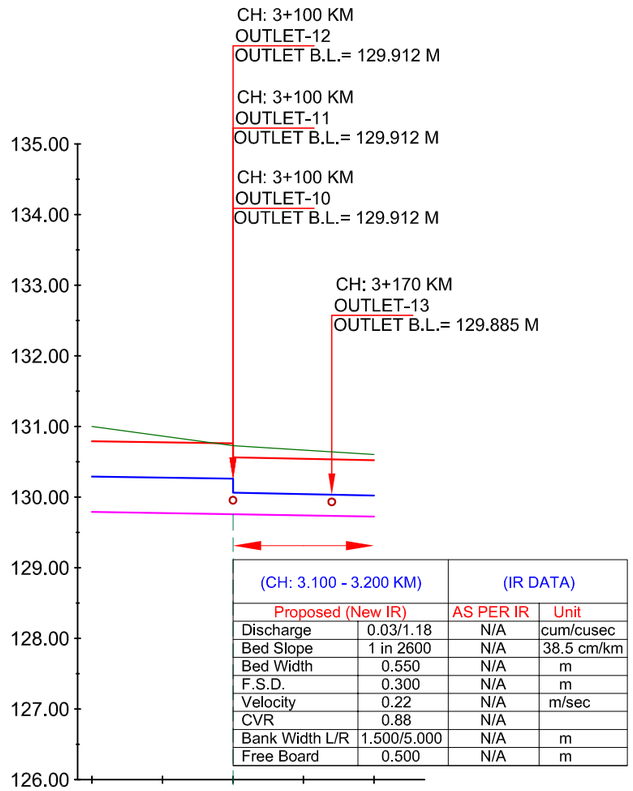
LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF BHARTIPUR MINOR (OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/ LSEC- 02 of 03

L- SECTION OF BHARTIPUR MINOR
(OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
FROM CH 3+000 TO 3+200



(CH: 3.100 - 3.200 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.03/1.18	N/A	cum/cusec
Bed Slope	1 in 2600	N/A	38.5 cm/km
Bed Width	0.550	N/A	m
F.S.D.	0.300	N/A	m
Velocity	0.22	N/A	m/sec
CVR	0.88	N/A	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	N/A	m

		3+000	3+050	3+100	3+150	3+200
DESIGN DATA	TOP OF BANK LEVEL	130.790	130.776	130.762 130.562	130.543	130.523
	F.S.L.	130.290	130.276	130.262 130.062	130.043	130.023
	Proposed Bed Level	129.790	129.776	129.762	129.743	129.723
EXISTING DATA	Bed Level					
	TOP OF BANK LEVEL					
	NSL	131.002		130.730		130.605
	Chainage IN KM	3+000	3+050	3+100	3+150	3+200

LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

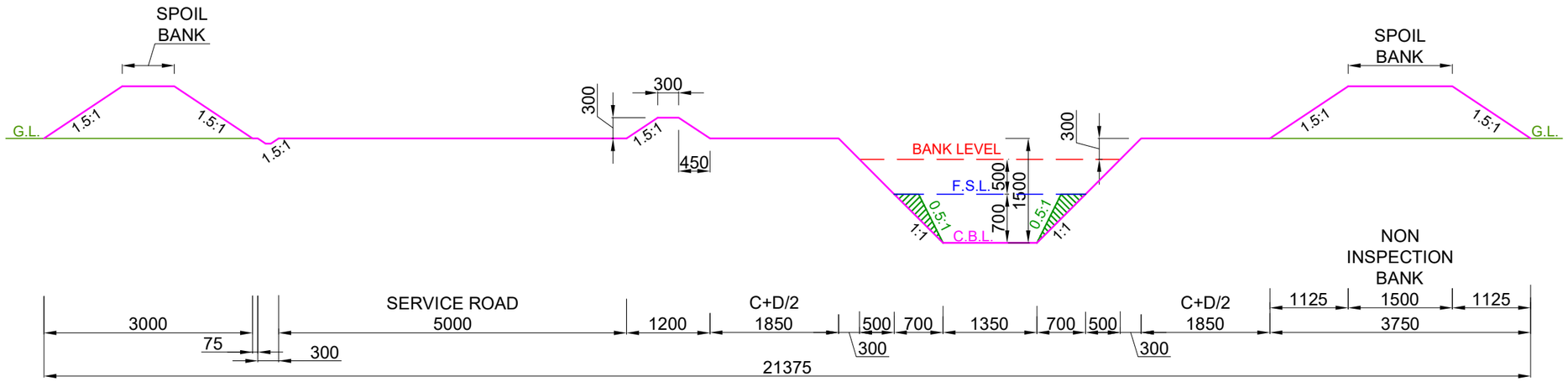
IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF BHARTIPUR MINOR (OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/ LSEC- 03 of 03

TYPICAL X-SECTION

TYPICAL X - SECTION OF BHARTIPUR MINOR
(OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 0.000 KM TO CH: 0.150 KM

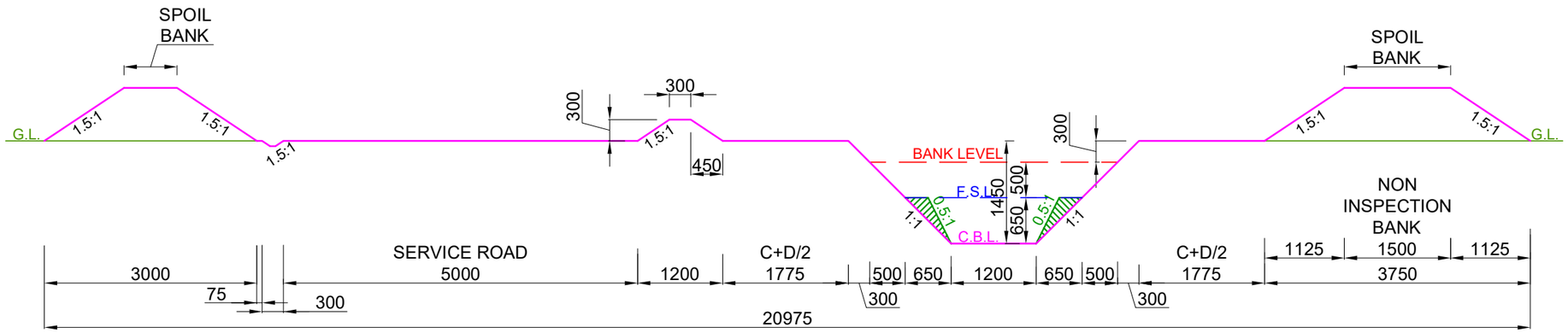
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BHARTIPUR MINOR (OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/ XSEC /TYP-(FC) 1 of 4

TYPICAL X - SECTION OF BHARTIPUR MINOR
(OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 0.150 KM TO CH: 1.600 KM

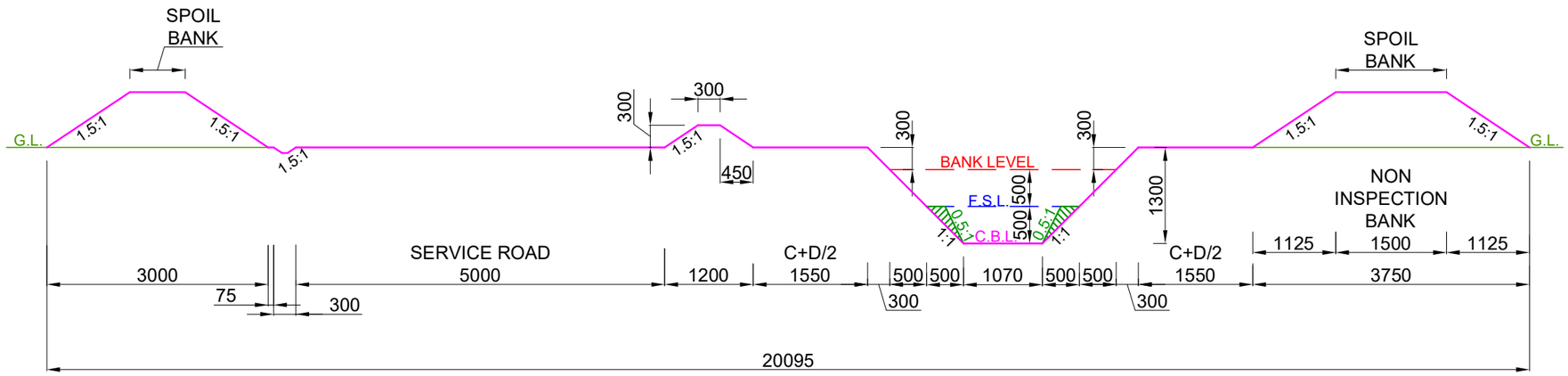
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
CUT AREA			Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
FILL AREA			Drawing Title :-	X - SECTION OF BHARTIPUR MINOR (OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/ XSEC /TYP-(FC) 2 of 4

TYPICAL X - SECTION OF BHARTIPUR MINOR
(OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 1.600 KM TO CH: 3.100 KM

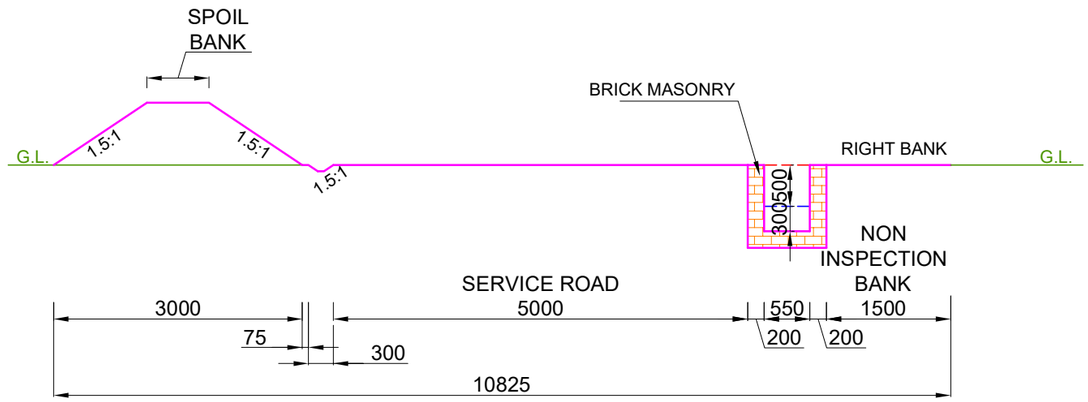
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BHARTIPUR MINOR (OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/ XSEC /TYP-(FC) 3 of 4

TYPICAL X - SECTION OF BHARTIPUR MINOR
(OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 3.100 KM TO CH: 3.200 KM

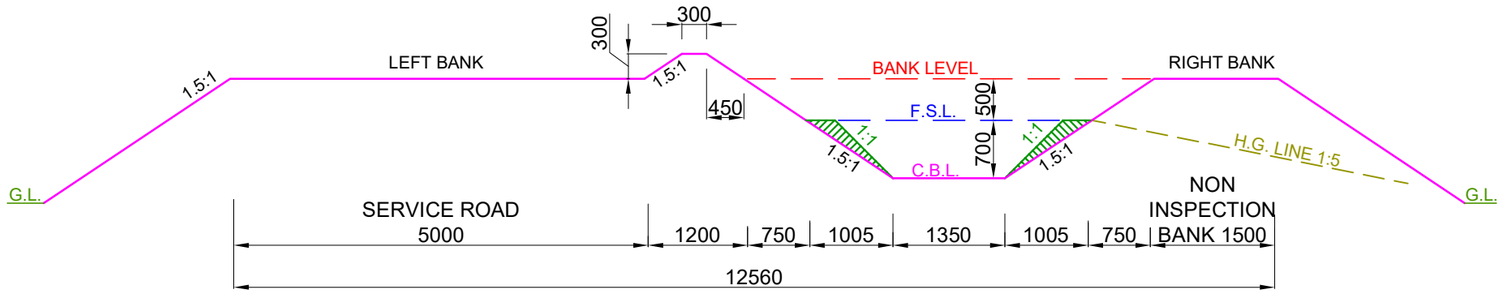
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BHARTIPUR MINOR (OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/ XSEC /TYP-(FC) 4 of 4

TYPICAL X - SECTION OF BHARTIPUR MINOR
(OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 0.000 KM TO CH: 0.150 KM

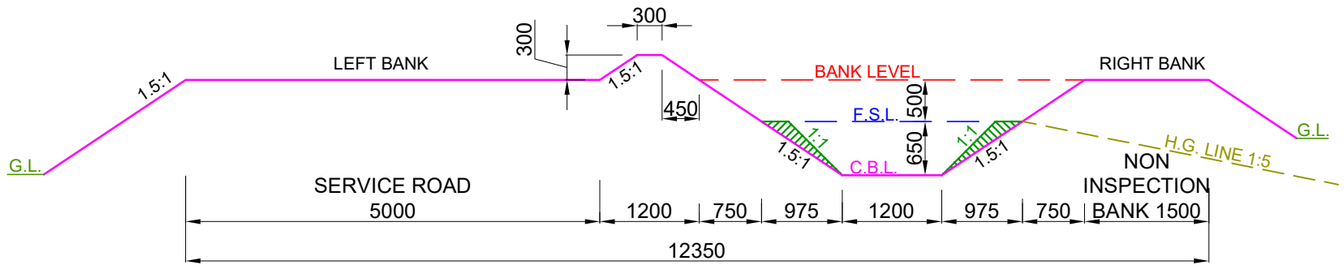
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BHARTIPUR MINOR (OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/ XSEC /TYP-(FF) 1 of 4

TYPICAL X - SECTION OF BHARTIPUR MINOR
(OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 0.150 KM TO CH: 1.600 KM

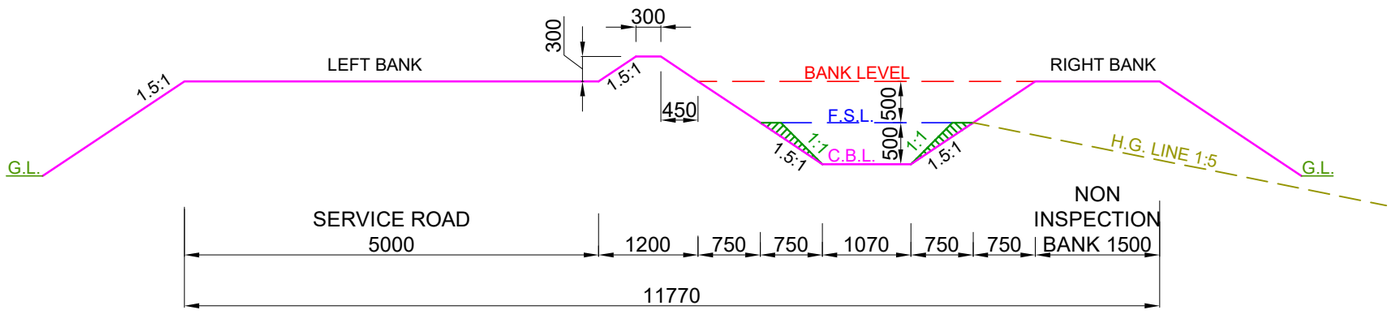
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BHARTIPUR MINOR (OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/ XSEC /TYP-(FF) 2 of 4

TYPICAL X - SECTION OF BHARTIPUR MINOR
(OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 1.600 KM TO CH: 3.100 KM

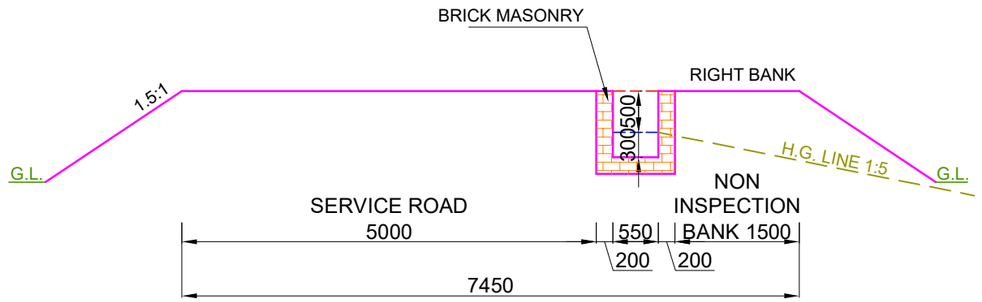
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BHARTIPUR MINOR (OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/ XSEC /TYP-(FF) 3 of 4

TYPICAL X - SECTION OF BHARTIPUR MINOR
(OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 3.100 KM TO CH: 3.200 KM

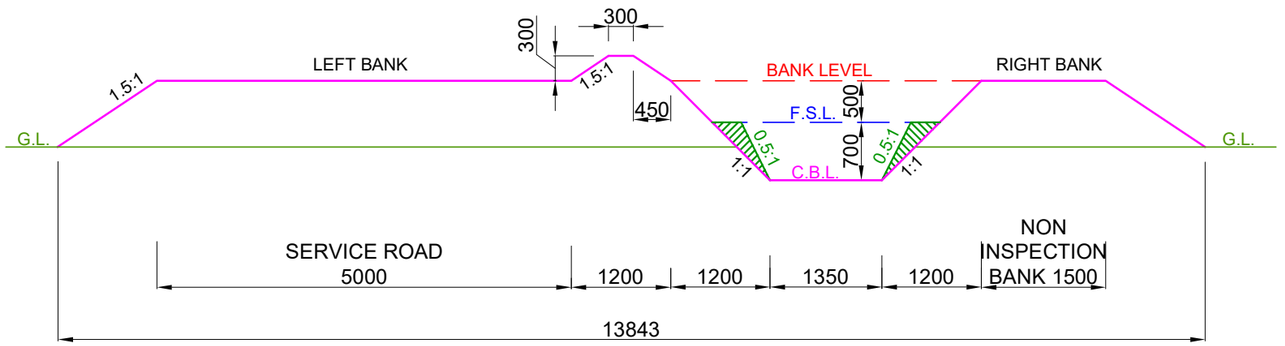
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BHARTIPUR MINOR (OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/ XSEC /TYP-(FF) 4 of 4

TYPICAL X - SECTION OF BHARTIPUR MINOR
(OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR PARTLY CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 0.000 KM TO CH: 0.150 KM

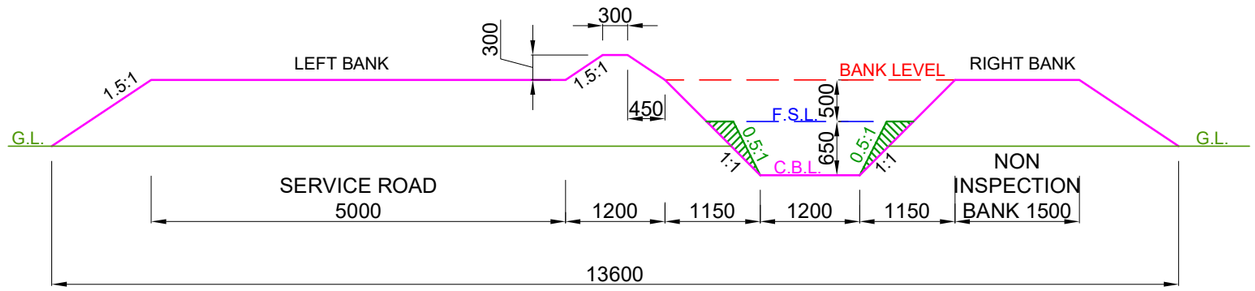
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BHARTIPUR MINOR (OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/ XSEC /TYP-(PCF) 1 of 4

TYPICAL X - SECTION OF BHARTIPUR MINOR
(OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR PARTLY CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 0.150 KM TO CH: 1.600 KM

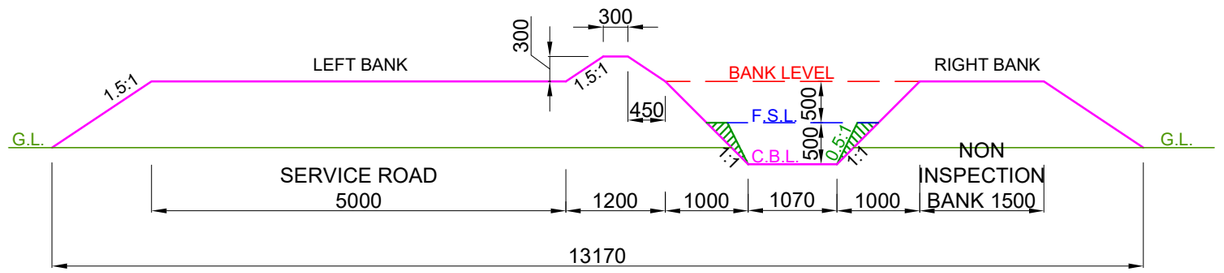
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BHARTIPUR MINOR (OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/ XSEC /TYP-(PCF) 2 of 4

TYPICAL X - SECTION OF BHARTIPUR MINOR
(OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR PARTLY CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 1.600 KM TO CH: 3.100 KM

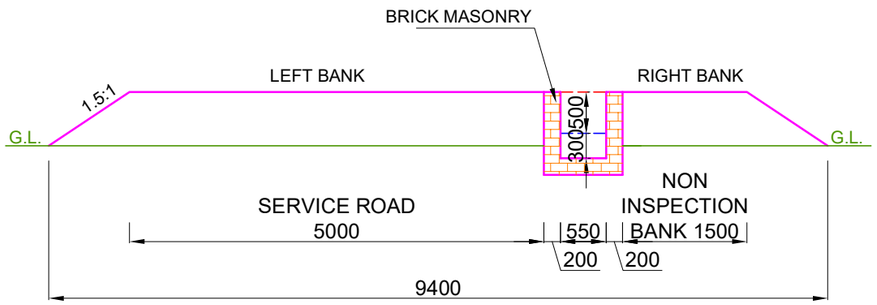
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BHARTIPUR MINOR (OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/ XSEC /TYP-(PCF) 3 of 4

TYPICAL X - SECTION OF BHARTIPUR MINOR
(OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR PARTLY CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 3.100 KM TO CH: 3.200 KM

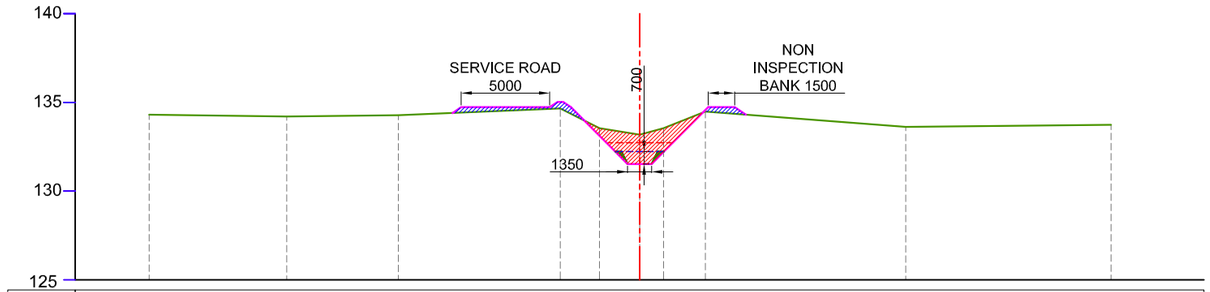
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BHARTIPUR MINOR (OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/ XSEC /TYP-(PCF) 4 of 4

CROSS-SECTION

X SECTION OF BHARTI PUR MINOR

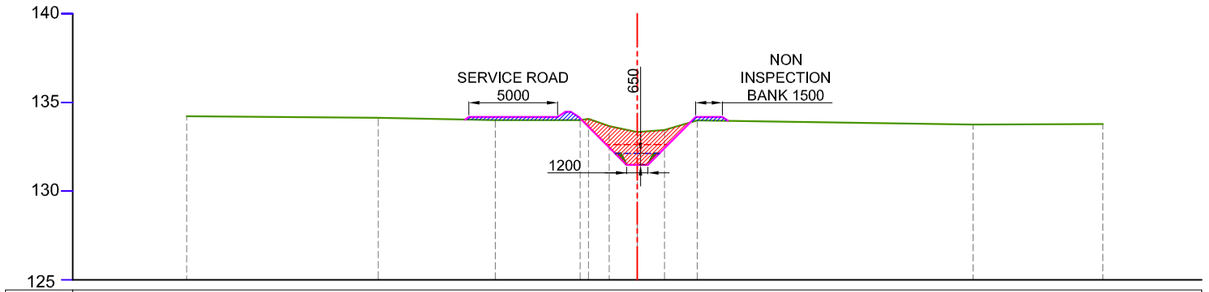


EXIST. LEVEL (M)	134.302	134.206	134.275	134.660	133.546	133.1850	134.483	133.615	133.732
OFFSET (M)	27.675	19.916	13.609	4.475	2.262	0.000	3.718	15.020	26.597

CUTTING AREA (SQ.M) = 6.789
FILLING AREA (SQ.M) = 2.227

CH : 0+100 KM

DESIGNED BED LEVEL = 131.533 M

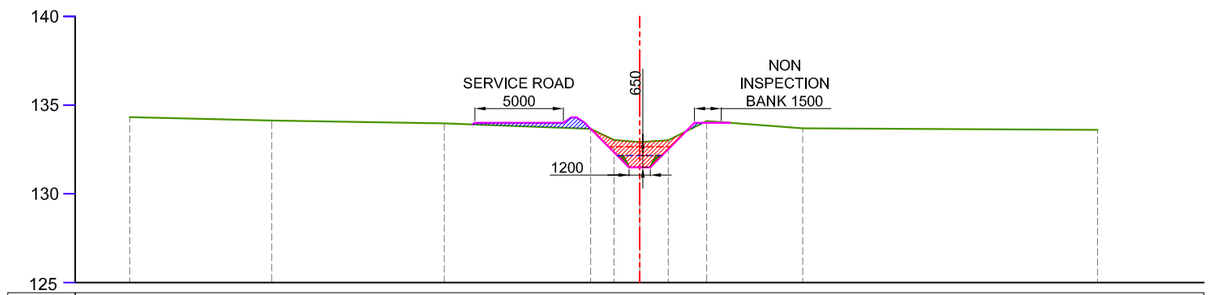


EXIST. LEVEL (M)	134.222	134.126	134.001	134.003	133.3240	133.992		133.754	133.787
OFFSET (M)	25.426	14.622	8.018	3.221	0.000	3.391		18.948	26.271

CUTTING AREA (SQ.M) = 7.029
FILLING AREA (SQ.M) = 1.672

CH : 0+300 KM

DESIGNED BED LEVEL = 131.476 M

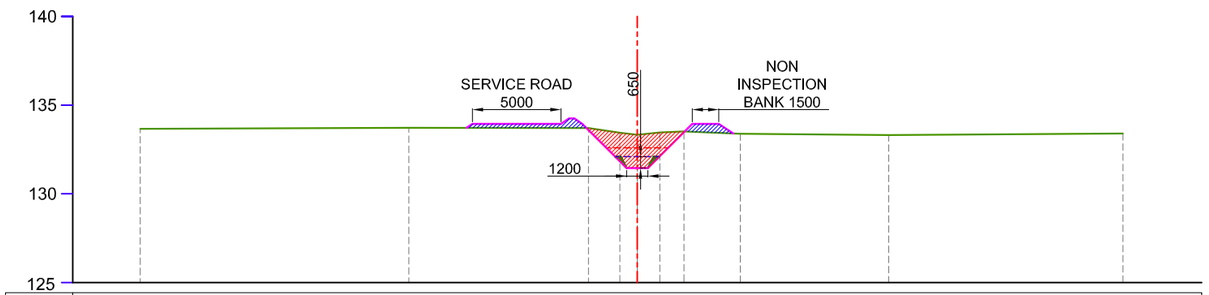


EXIST. LEVEL (M)	134.318	134.133	133.979	133.673	132.9209	134.102	133.693		133.601
OFFSET (M)	28.778	20.769	11.025	2.757	0.000	3.790	9.199		25.839

CUTTING AREA (SQ.M) = 4.333
FILLING AREA (SQ.M) = 1.669

CH : 0+200 KM

DESIGNED BED LEVEL = 131.505 M



EXIST. LEVEL (M)	133.665	133.731	133.716	133.3270	133.525	133.383		133.311	133.409
OFFSET (M)	28.053	12.884	2.755	0.000	2.638	5.814		14.198	27.405

CUTTING AREA (SQ.M) = 6.553
FILLING AREA (SQ.M) = 2.715

CH : 0+400 KM

DESIGNED BED LEVEL = 131.448 M

LEGEND

CUT AREA

FILL AREA

EXISTING BED LINE

F.S.L.

DESIGNED BED LINE

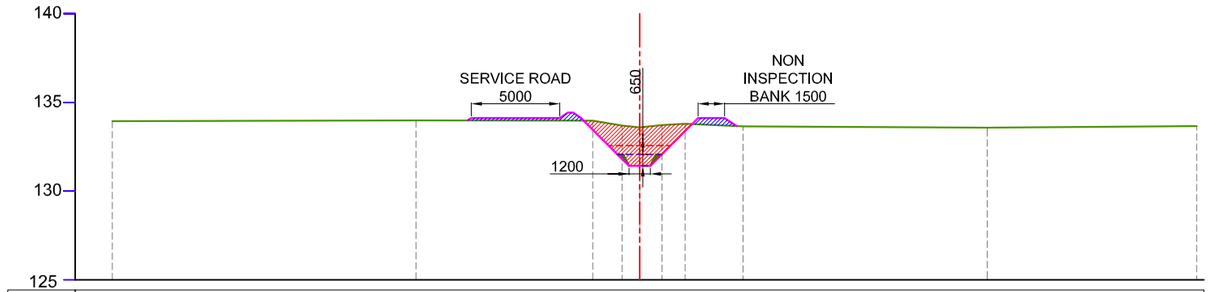
H.G. LINE

Prepared by :-

WAPCOS LTD.

Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
Drawing Title :-	X SECTION OF BHARTUIPUR MINOR (OFFTAKE FROM 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/ XSEC- 1 of 8

X SECTION OF BHARTI PUR MINOR

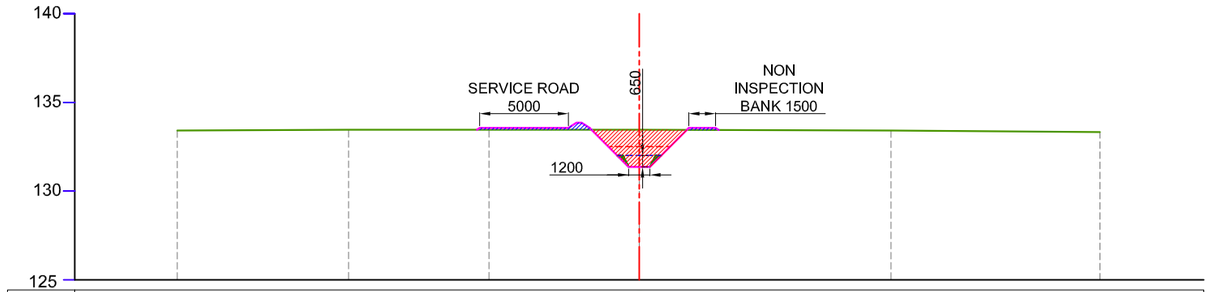


EXIST. LEVEL (M)	133.939	133.992	133.977	133.5880	133.792	133.644	133.572	133.670
OFFSET (M)	29.753	12.618	2.641	0.000	2.569	5.831	19.616	31.435

CUTTING AREA (SQ.M) = 8.266
FILLING AREA (SQ.M) = 1.894

CH : 0+500 KM

DESIGNED BED LEVEL = 131.419 M

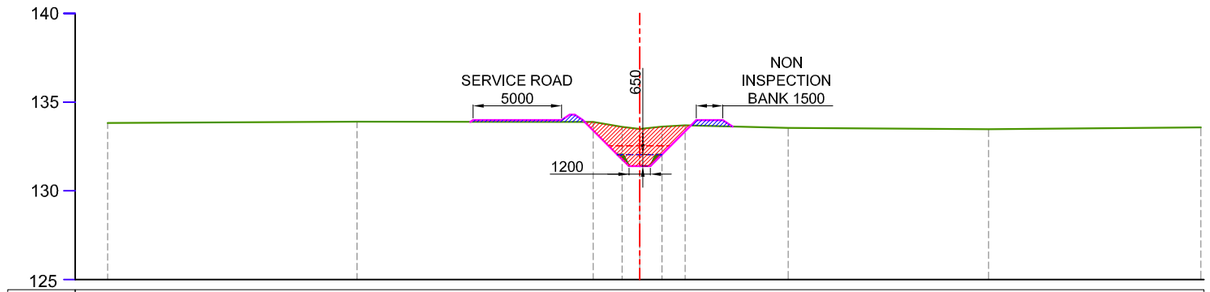


EXIST. LEVEL (M)	133.415	133.454	133.457	133.4570	133.415	133.329
OFFSET (M)	26.072	16.398	8.485	0.000	14.207	25.994

CUTTING AREA (SQ.M) = 6.982
FILLING AREA (SQ.M) = 1.080

CH : 0+700 KM

DESIGNED BED LEVEL = 131.362 M

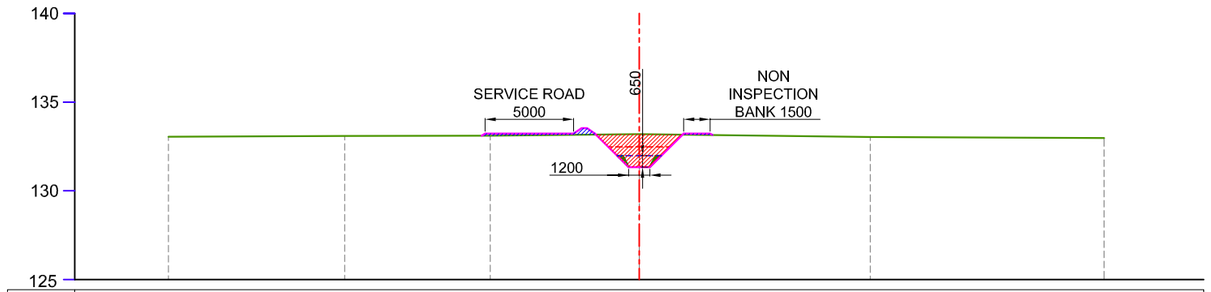


EXIST. LEVEL (M)	133.827	133.893	133.878	133.4890	133.693	133.545	133.473	133.571
OFFSET (M)	30.022	15.945	2.615	0.000	2.568	8.380	19.690	31.669

CUTTING AREA (SQ.M) = 7.841
FILLING AREA (SQ.M) = 1.559

CH : 0+600 KM

DESIGNED BED LEVEL = 131.391 M



EXIST. LEVEL (M)	133.055	133.099	133.109	133.2017	133.030	132.978
OFFSET (M)	26.573	16.630	8.412	0.000	13.041	26.227

CUTTING AREA (SQ.M) = 5.662
FILLING AREA (SQ.M) = 0.932

CH : 0+800 KM

DESIGNED BED LEVEL = 131.333 M

LEGEND

CUT AREA

FILL AREA

EXISTING BED LINE

F.S.L.

DESIGNED BED LINE

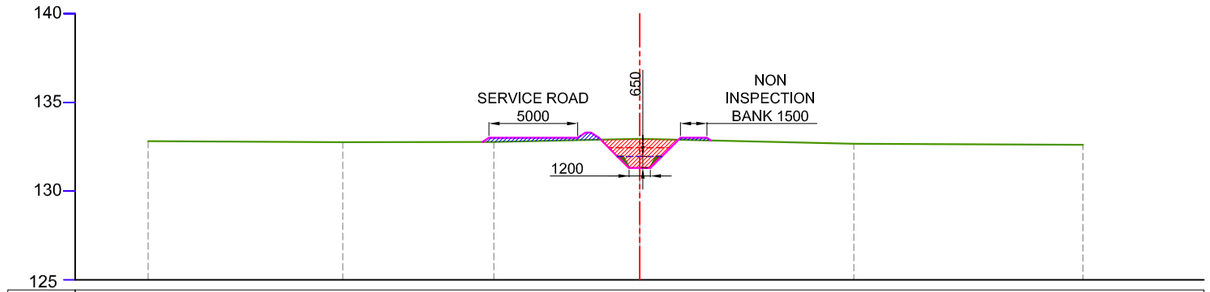
H.G. LINE

Prepared by :-

WAPCOS LTD.

Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
Drawing Title :-	X SECTION OF BHARTUIPUR MINOR (OFFTAKE FROM 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/ XSEC- 2 of 8

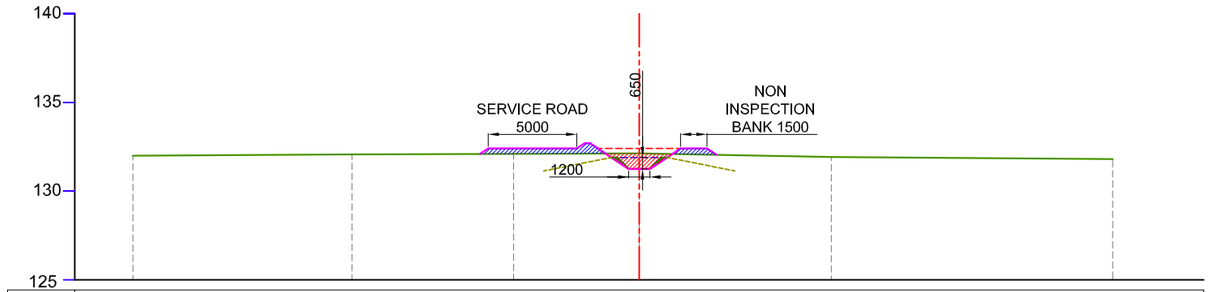
X SECTION OF BHARTI PUR MINOR



EXIST. LEVEL (M)	132.822	132.765	132.780	132.9520	132.670	132.619
OFFSET (M)	27.738	16.751	8.220	0.000	12.090	25.016

CUTTING AREA (SQ.M) = 4.544
FILLING AREA (SQ.M) = 1.572

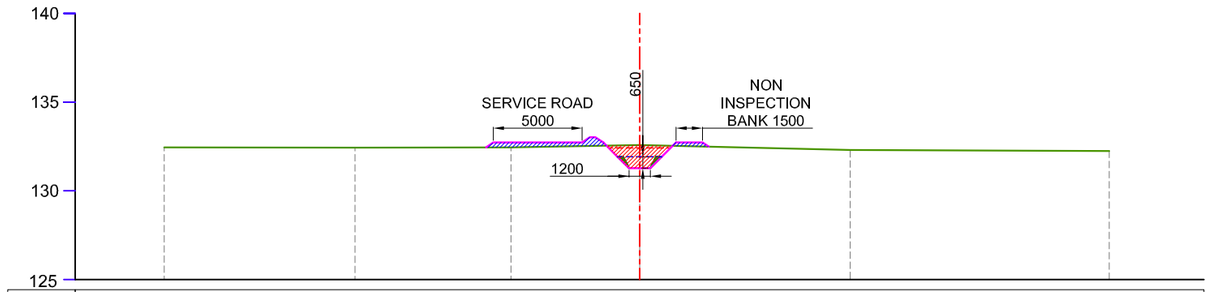
CH : 0+900 KM
DESIGNED BED LEVEL = 131.305 M



EXIST. LEVEL (M)	132.001	132.075	132.105	132.1310	131.923	131.798
OFFSET (M)	28.570	16.212	7.093	0.000	10.843	26.721

CUTTING AREA (SQ.M) = 2.188
FILLING AREA (SQ.M) = 2.778

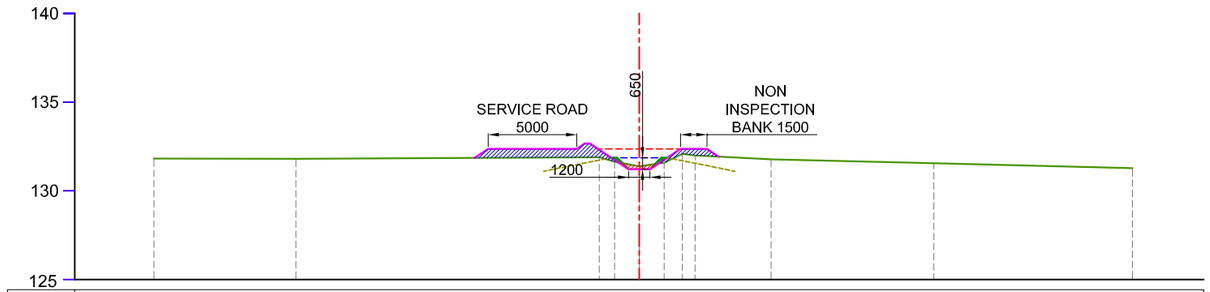
CH : 1+100 KM
DESIGNED BED LEVEL = 131.248 M



EXIST. LEVEL (M)	132.446	132.433	132.456	132.5760	132.310	132.243
OFFSET (M)	26.829	16.063	7.259	0.000	11.890	26.509

CUTTING AREA (SQ.M) = 3.181
FILLING AREA (SQ.M) = 1.572

CH : 1+000 KM
DESIGNED BED LEVEL = 131.276 M



EXIST. LEVEL (M)	131.821	131.806	131.889	131.3840	132.000	131.771	131.559	131.272
OFFSET (M)	27.382	19.384	2.256	0.000	3.150	7.441	16.627	27.822

CUTTING AREA (SQ.M) = 0.394
FILLING AREA (SQ.M) = 4.698

CH : 1+200 KM
DESIGNED BED LEVEL = 131.219 M

LEGEND

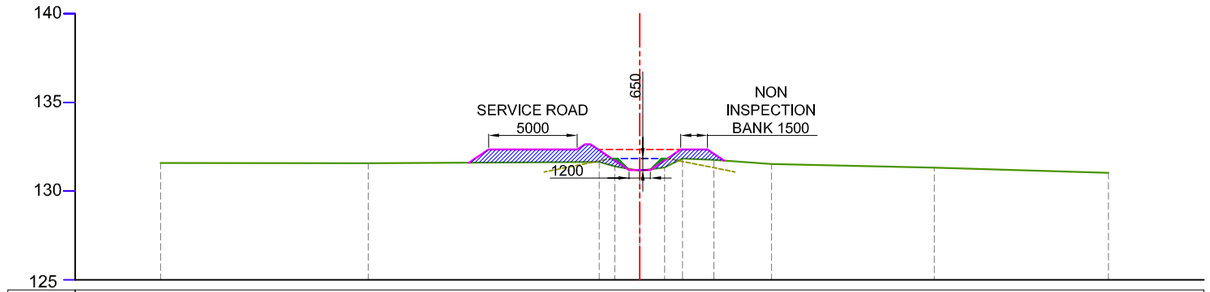
CUT AREA	EXISTING BED LINE
	F.S.L.
FILL AREA	DESIGNED BED LINE
	H.G. LINE

Prepared by :-

WAPCOS LTD.

Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
Drawing Title :-	X SECTION OF BHARTUIPUR MINOR (OFFTAKE FROM 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/ XSEC- 3 of 8

X SECTION OF BHARTI PUR MINOR

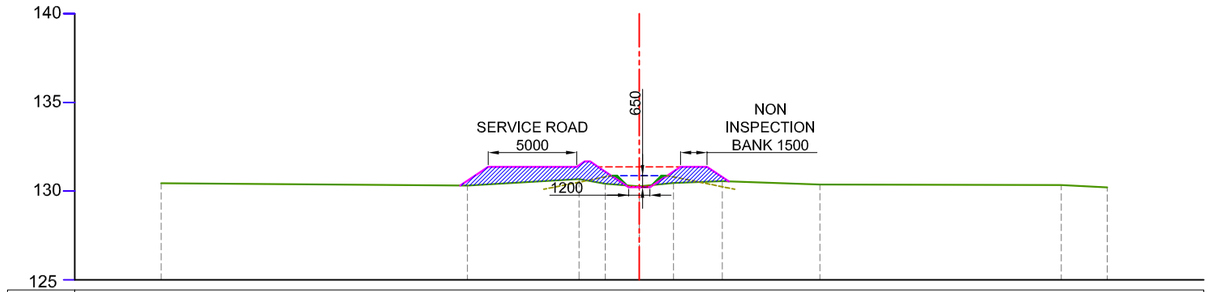


EXIST. LEVEL (M)	131.579	131.564	131.647	131.1420	131.757	131.529	131.317	131.030
OFFSET (M)	27.033	15.314	2.280	0.000	4.202	7.444	16.630	26.457

CUTTING AREA (SQ.M) = 0.020
FILLING AREA (SQ.M) = 7.285

CH : 1+300 KM

DESIGNED BED LEVEL = 131.191 M

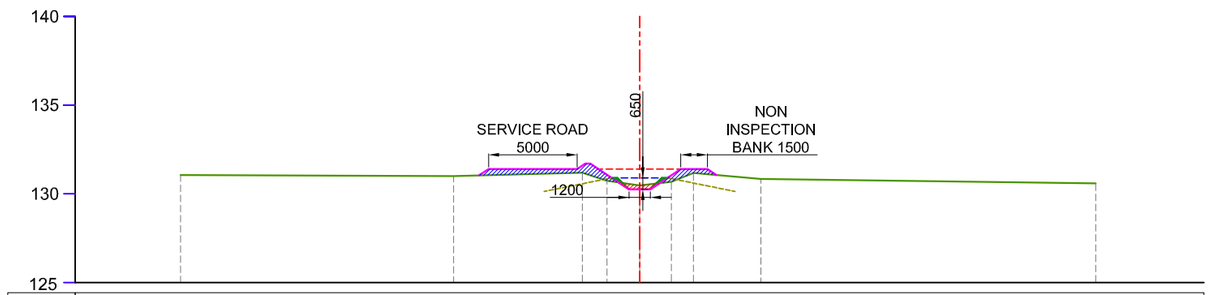


EXIST. LEVEL (M)	130.439	130.310	130.673	130.2689	130.452	130.562	130.373	130.346	130.214
OFFSET (M)	26.976	9.701	3.400	0.000	1.931	4.692	10.198	23.813	26.410

CUTTING AREA (SQ.M) = 0.108
FILLING AREA (SQ.M) = 9.410

CH : 1+500 KM

DESIGNED BED LEVEL = 130.219 M

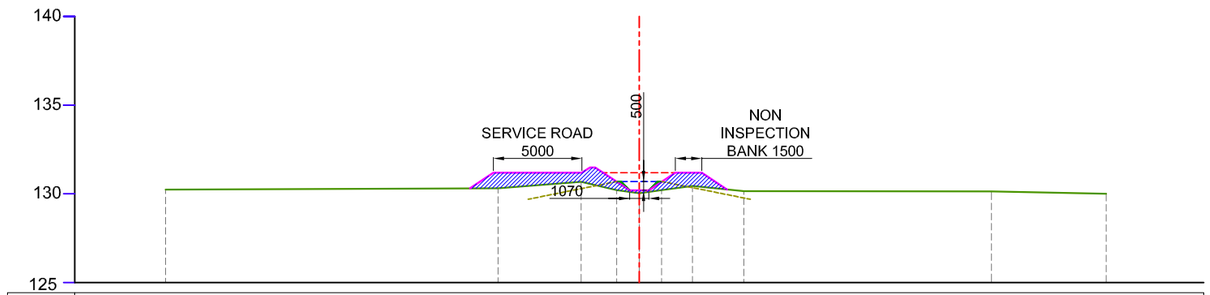


EXIST. LEVEL (M)	131.060	131.003	131.185	130.4750	131.174	130.842	130.587
OFFSET (M)	25.910	10.500	3.227	0.000	3.035	6.850	25.744

CUTTING AREA (SQ.M) = 0.487
FILLING AREA (SQ.M) = 3.336

CH : 1+400 KM

DESIGNED BED LEVEL = 130.248 M



EXIST. LEVEL (M)	130.237	130.318	130.679	130.0266	130.447	130.146	130.134	130.008
OFFSET (M)	26.731	7.961	3.278	0.000	3.007	5.900	19.882	26.356

CUTTING AREA (SQ.M) = 0.000
FILLING AREA (SQ.M) = 8.390

CH : 1+600 KM

DESIGNED BED LEVEL = 130.190 M

LEGEND

CUT AREA

FILL AREA

EXISTING BED LINE

F.S.L.

DESIGNED BED LINE

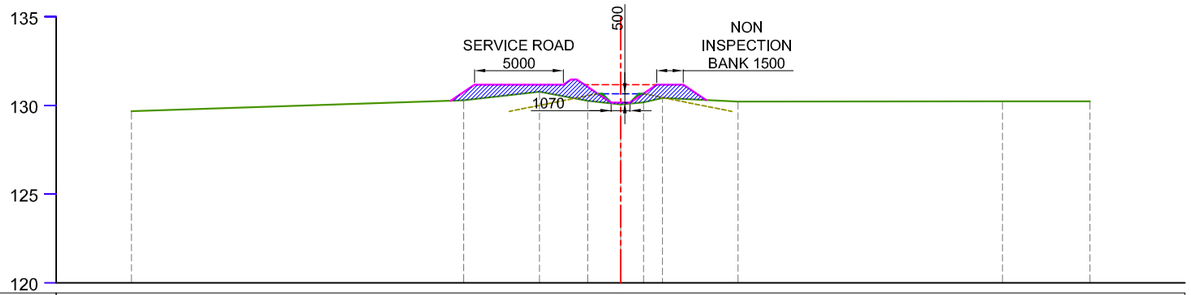
H.G. LINE

Prepared by :-

WAPCOS LTD.

Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
Drawing Title :-	X SECTION OF BHARTUIPUR MINOR (OFFTAKE FROM 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/ XSEC- 4 of 8

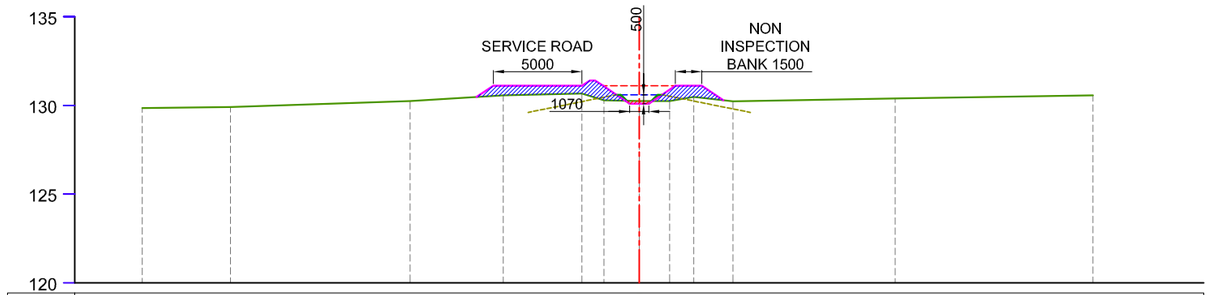
X SECTION OF BHARTI PUR MINOR



EXIST. LEVEL (M)	129.676	130.286	130.769	130.258	130.0600	130.421	130.218	130.226	130.233
OFFSET (M)	27.602	8.849	4.577	1.848	0.000	2.364	6.621	21.550	26.492

CUTTING AREA (SQ.M) = 0.000
FILLING AREA (SQ.M) = 7.724

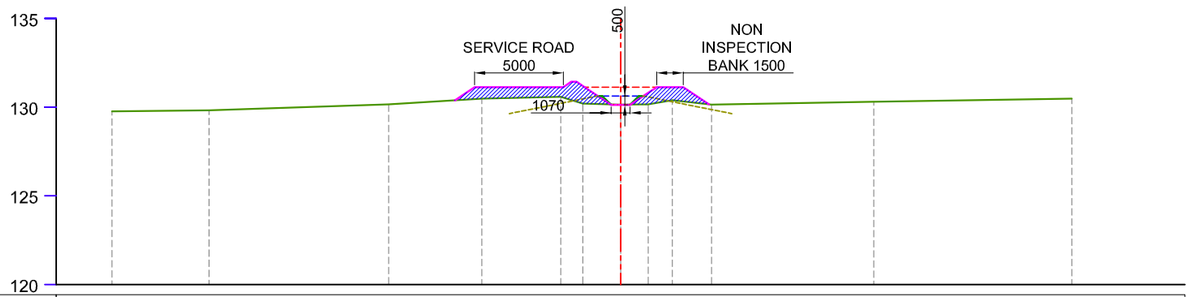
CH : 1+700 KM
DESIGNED BED LEVEL = 130.162 M



EXIST. LEVEL (M)	129.855	129.905	130.243	130.569	130.675	130.2390	130.477	130.238	130.397	130.567
OFFSET (M)	28.052	23.075	12.938	7.681	3.230	0.000	3.071	5.282	14.438	25.603

CUTTING AREA (SQ.M) = 0.179
FILLING AREA (SQ.M) = 6.199

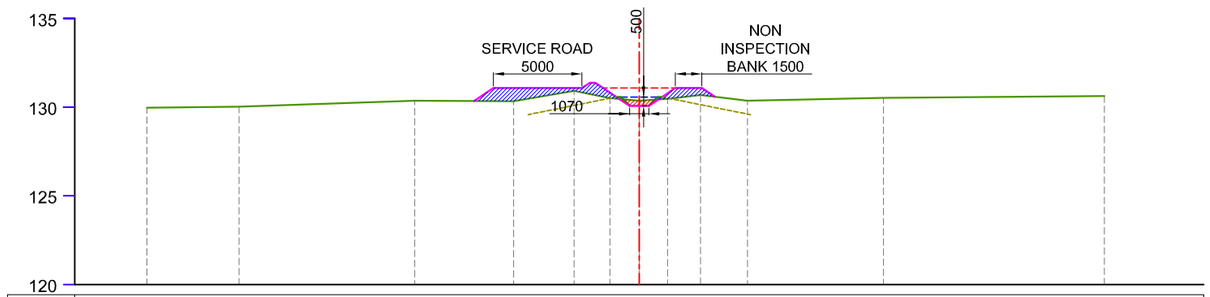
CH : 1+900 KM
DESIGNED BED LEVEL = 130.105 M



EXIST. LEVEL (M)	129.767	129.817	130.155	130.481	130.587	130.1510	130.389	130.150	130.309	130.479
OFFSET (M)	28.561	23.075	12.939	7.682	3.230	0.000	3.069	5.281	14.436	25.602

CUTTING AREA (SQ.M) = 0.023
FILLING AREA (SQ.M) = 7.713

CH : 1+800 KM
DESIGNED BED LEVEL = 130.133 M



EXIST. LEVEL (M)	129.974	130.026	130.367	130.342	130.920	130.507	130.3610	130.462	130.682	130.361	130.519	130.631
OFFSET (M)	27.786	22.578	12.669	7.083	3.671	1.656	0.000	1.591	3.454	6.111	13.787	26.249

CUTTING AREA (SQ.M) = 0.506
FILLING AREA (SQ.M) = 4.889

CH : 2+000 KM
DESIGNED BED LEVEL = 130.076 M

LEGEND

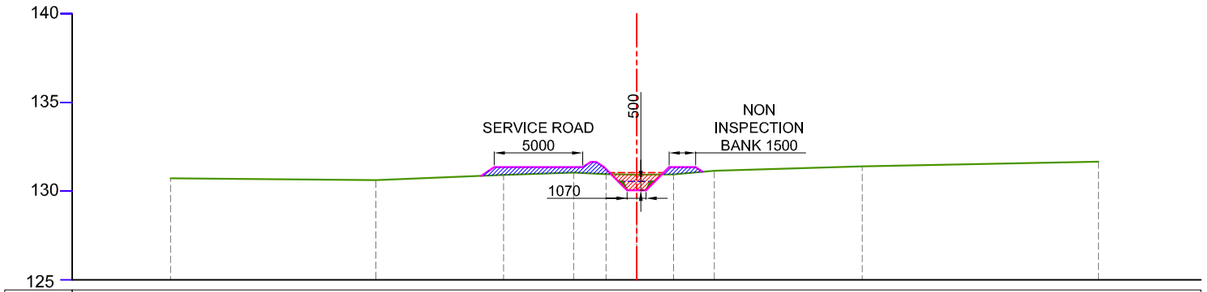
CUT AREA
FILL AREA
EXISTING BED LINE
F.S.L.
DESIGNED BED LINE
H.G. LINE

Prepared by :-

WAPCOS LTD.

Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
Drawing Title :-	X SECTION OF BHARTUIPUR MINOR (OFFTAKE FROM 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/ XSEC- 5 of 8

X SECTION OF BHARTI PUR MINOR

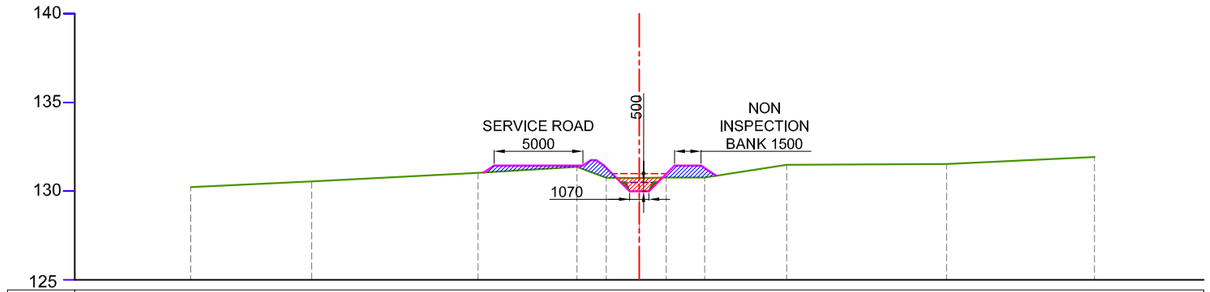


EXIST. LEVEL (M)	130.725	130.620	130.906	131.044	130.951	130.9312	130.942	131.139	131.388	131.657
OFFSET (M)	26.297	14.707	7.504	3.554	1.725	0.000	2.079	4.392	12.734	26.066

CUTTING AREA (SQ.M) = 1.742
FILLING AREA (SQ.M) = 3.471

CH : 2+100 KM

DESIGNED BED LEVEL = 130.048 M

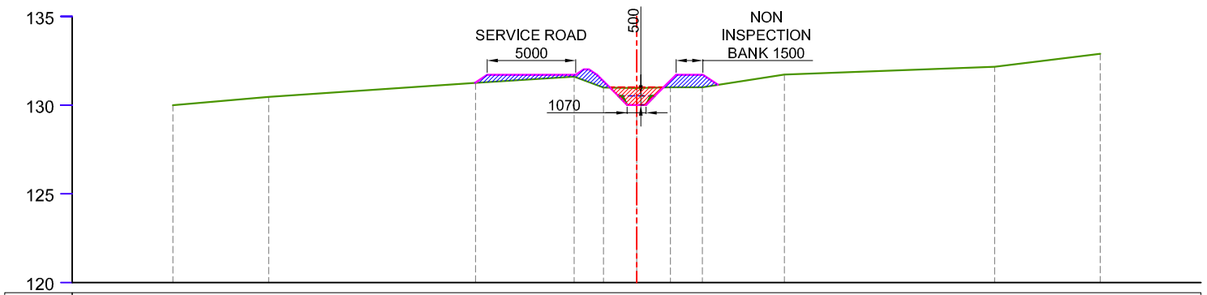


EXIST. LEVEL (M)	130.230	130.541	131.022	131.369	130.7300	130.771	131.484	131.521	131.919
OFFSET (M)	25.306	18.480	9.090	3.518	0.000	3.698	8.324	17.338	25.691

CUTTING AREA (SQ.M) = 1.365
FILLING AREA (SQ.M) = 3.665

CH : 2+300 KM

DESIGNED BED LEVEL = 129.990 M

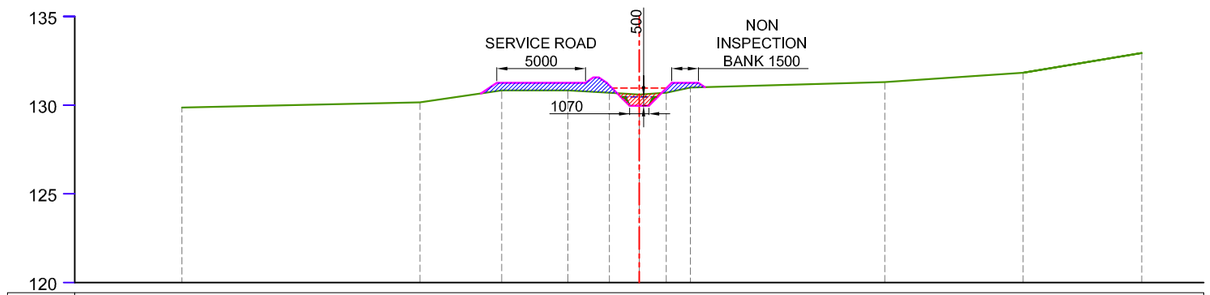


EXIST. LEVEL (M)	129.995	130.472	131.264	131.611	130.9720	131.002	131.013	131.726	132.161	132.897
OFFSET (M)	26.160	20.766	9.090	3.518	0.000	1.910	3.714	8.340	20.210	26.165

CUTTING AREA (SQ.M) = 1.959
FILLING AREA (SQ.M) = 3.959

CH : 2+200 KM

DESIGNED BED LEVEL = 130.019 M



EXIST. LEVEL (M)	129.867	130.164	130.834	130.837	130.6050	130.989	131.299	131.833	132.941
OFFSET (M)	25.806	12.379	7.764	4.033	0.000	2.884	13.861	21.661	28.361

CUTTING AREA (SQ.M) = 1.191
FILLING AREA (SQ.M) = 4.104

CH : 2+400 KM

DESIGNED BED LEVEL = 129.962 M

LEGEND

CUT AREA

FILL AREA

EXISTING BED LINE

F.S.L.

DESIGNED BED LINE

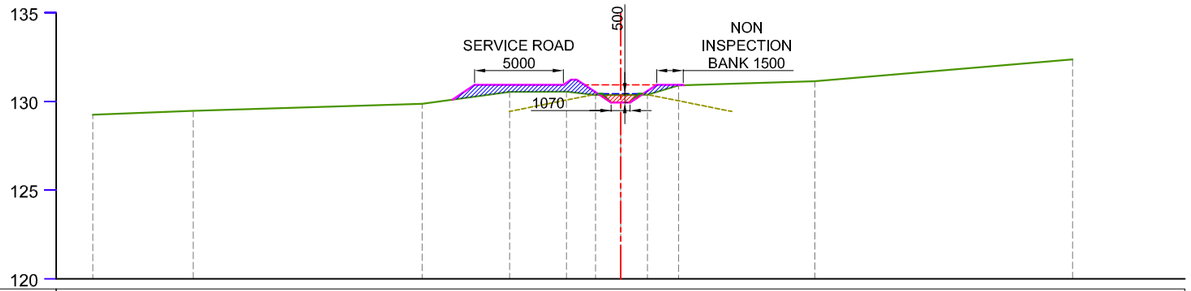
H.G. LINE

Prepared by :-

WAPCOS LTD.

Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
Drawing Title :-	X SECTION OF BHARTUIPUR MINOR (OFFTAKE FROM 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/ XSEC- 6 of 8

X SECTION OF BHARTI PUR MINOR

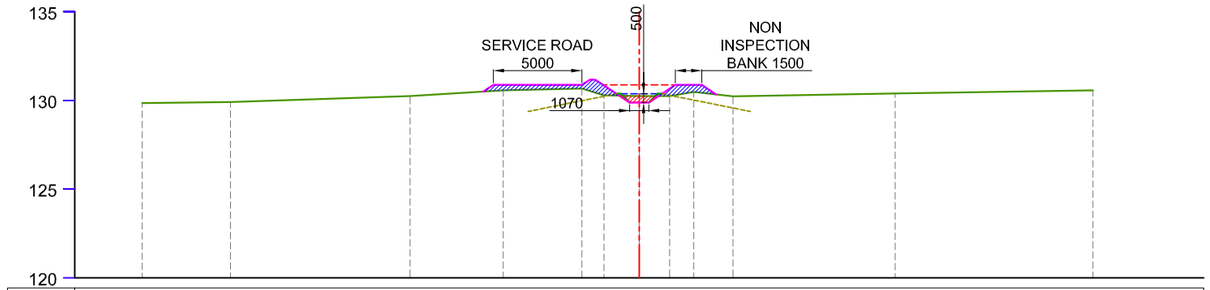


EXIST. LEVEL (M)	129.255	129.474	129.863	130.537	130.559	130.3582	130.900	131.139	132.367
OFFSET (M)	29.781	24.115	11.198	6.268	3.049	0.000	3.266	10.963	25.505

CUTTING AREA (SQ.M) = 0.741
FILLING AREA (SQ.M) = 4.044

CH : 2+500 KM

DESIGNED BED LEVEL = 129.933 M

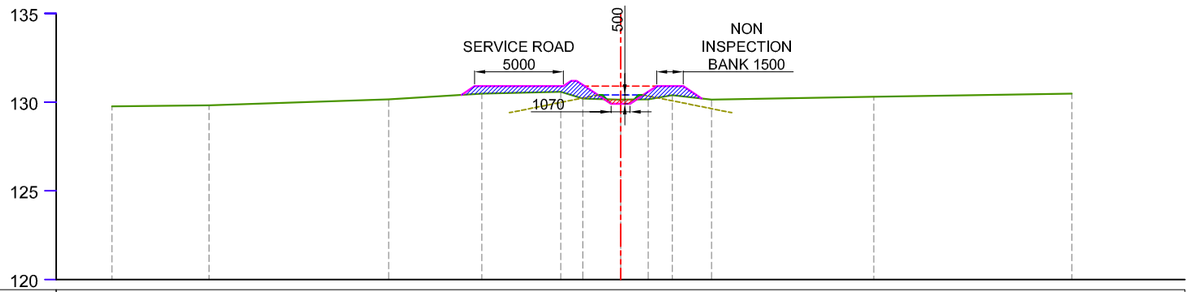


EXIST. LEVEL (M)	129.855	129.905	130.243	130.569	130.675	130.2390	130.477	130.238	130.397	130.567
OFFSET (M)	28.052	23.075	12.938	7.681	3.230	0.000	3.071	5.282	14.438	25.603

CUTTING AREA (SQ.M) = 0.605
FILLING AREA (SQ.M) = 3.526

CH : 2+700 KM

DESIGNED BED LEVEL = 129.876 M

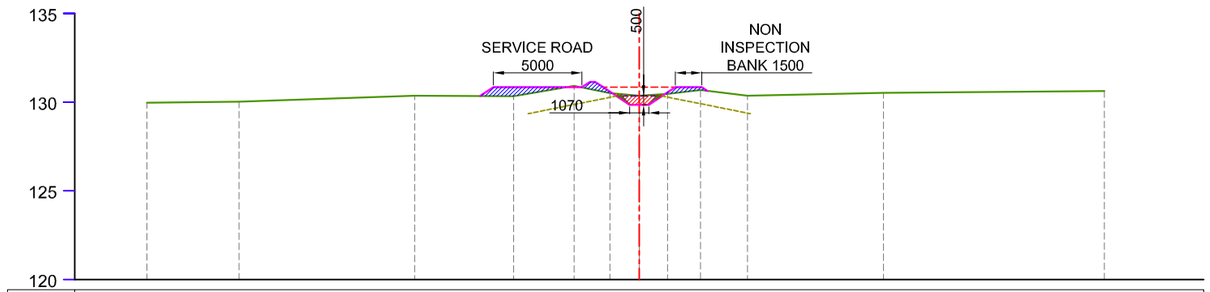


EXIST. LEVEL (M)	129.767	129.817	130.155	130.481	130.587	130.1510	130.389	130.150	130.309	130.479
OFFSET (M)	28.561	23.075	12.939	7.682	3.230	0.000	3.069	5.281	14.436	25.602

CUTTING AREA (SQ.M) = 0.365
FILLING AREA (SQ.M) = 4.874

CH : 2+600 KM

DESIGNED BED LEVEL = 129.905 M



EXIST. LEVEL (M)	129.974	130.026	130.367	130.342	130.920	130.507	130.3610	130.462	130.682	130.361	130.519	130.631
OFFSET (M)	27.786	22.578	12.669	7.083	3.671	1.656	0.000	1.591	3.454	6.111	13.787	26.249

CUTTING AREA (SQ.M) = 1.118
FILLING AREA (SQ.M) = 2.487

CH : 2+800 KM

DESIGNED BED LEVEL = 129.848 M

LEGEND

CUT AREA

FILL AREA

EXISTING BED LINE

F.S.L.

DESIGNED BED LINE

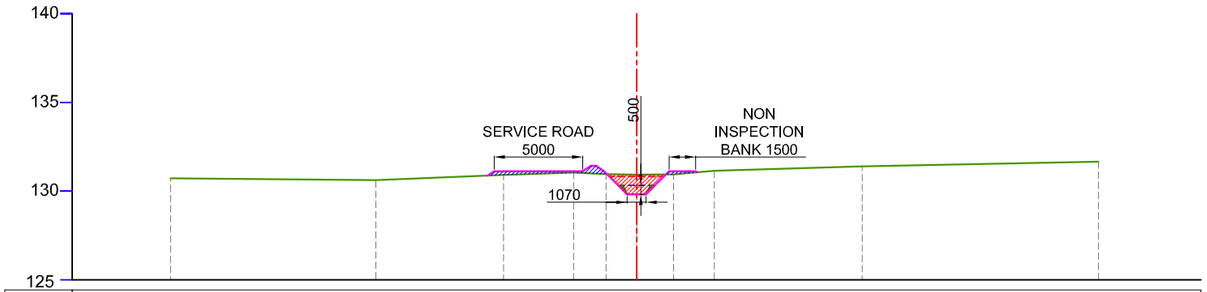
H.G. LINE

Prepared by :-

WAPCOS LTD.

Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
Drawing Title :-	X SECTION OF BHARTUIPUR MINOR (OFFTAKE FROM 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/ XSEC- 7 of 8

X SECTION OF BHARTI PUR MINOR

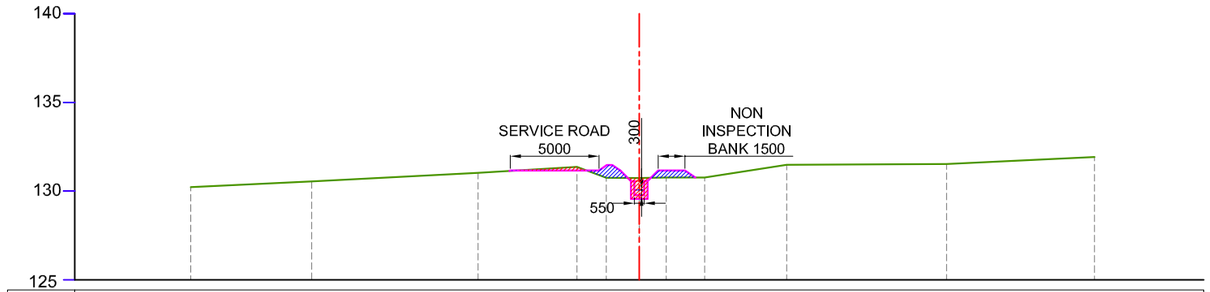


EXIST. LEVEL (M)	130.725	130.620	130.906	131.044	130.951	130.9312	130.942	131.139	131.388	131.657
OFFSET (M)	26.297	14.707	7.504	3.554	1.725	0.000	2.079	4.392	12.734	26.066

CUTTING AREA (SQ.M) = 2.450
FILLING AREA (SQ.M) = 1.392

CH : 2+900 KM

DESIGNED BED LEVEL = 129.819 M

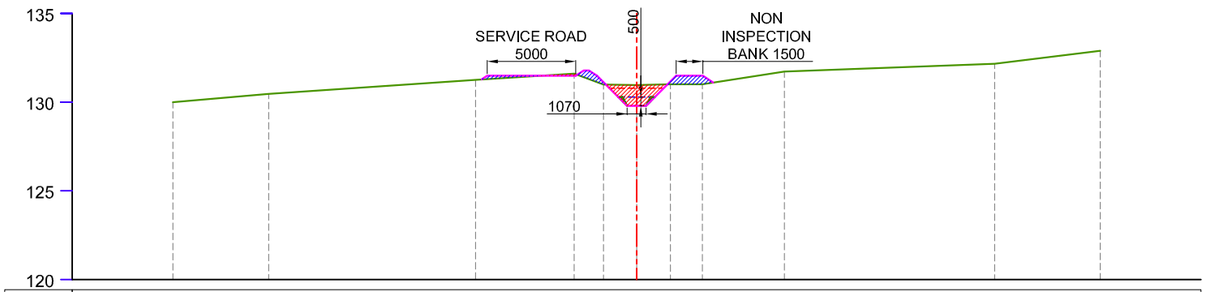


EXIST. LEVEL (M)	130.230	130.541	131.022	131.369	130.7300	130.771	131.484	131.521	131.919
OFFSET (M)	25.306	18.480	9.090	3.518	0.000	3.698	8.324	17.338	25.691

CUTTING AREA (SQ.M) = 1.546
FILLING AREA (SQ.M) = 1.679

CH : 3+100 KM

DESIGNED BED LEVEL = 129.762 M

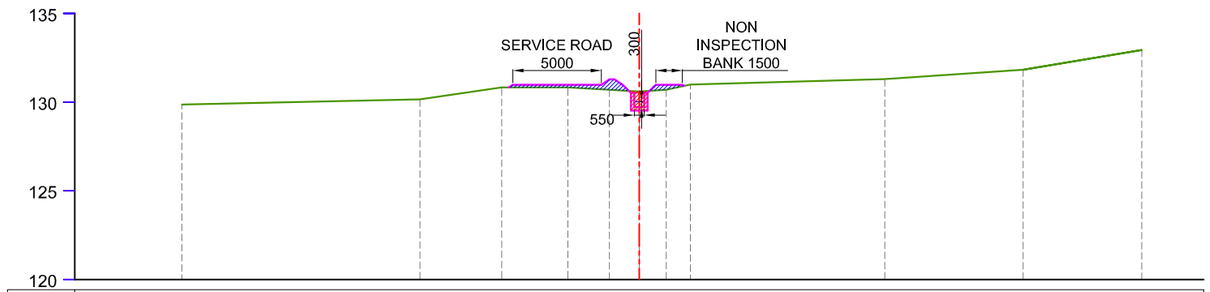


EXIST. LEVEL (M)	129.995	130.472	131.264	131.611	130.9720	131.002	131.013	131.726	132.161	132.897
OFFSET (M)	26.160	20.766	9.090	3.518	0.000	1.910	3.714	8.340	20.210	26.165

CUTTING AREA (SQ.M) = 2.833
FILLING AREA (SQ.M) = 1.769

CH : 3+000 KM

DESIGNED BED LEVEL = 129.790 M



EXIST. LEVEL (M)	129.867	130.164	130.834	130.837	130.6050	130.989	131.299	131.833	132.941
OFFSET (M)	25.806	12.379	7.764	4.033	0.000	2.884	13.861	21.661	28.361

CUTTING AREA (SQ.M) = 1.055
FILLING AREA (SQ.M) = 1.897

CH : 3+200 KM

DESIGNED BED LEVEL = 129.723 M

LEGEND

CUT AREA

FILL AREA

EXISTING BED LINE

F.S.L.

DESIGNED BED LINE

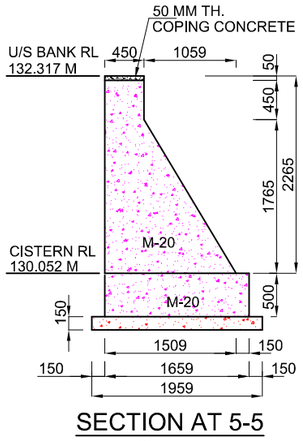
H.G. LINE

Prepared by :-

WAPCOS LTD.

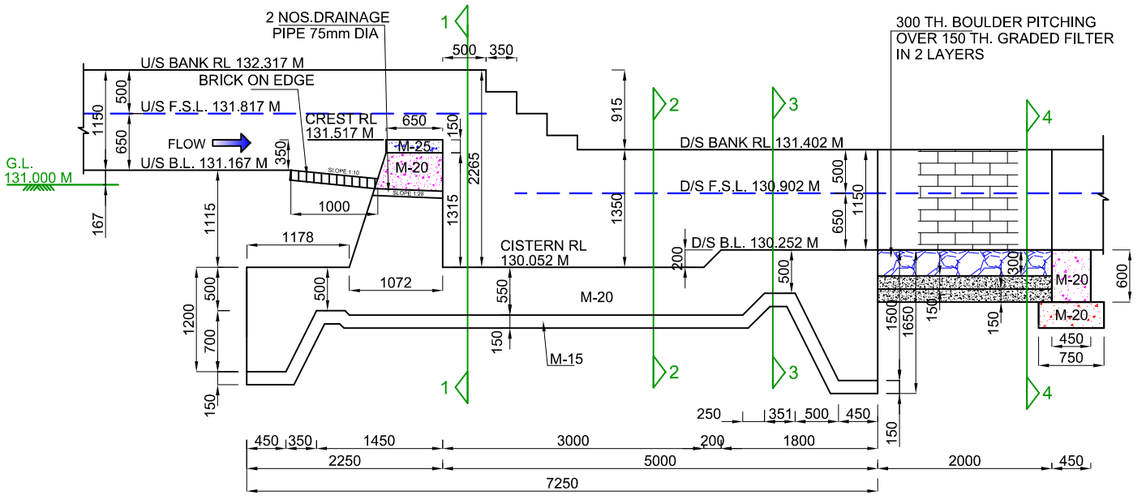
Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
Drawing Title :-	X SECTION OF BHARTUIPUR MINOR (OFFTAKE FROM 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/ XSEC- 8 of 8

DRAWING OF STRUCTURES



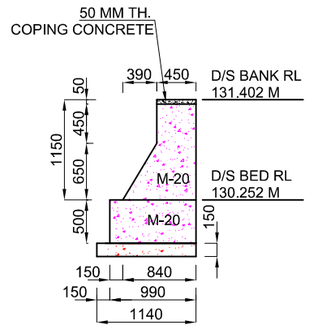
SECTION AT 5-5

(SCALE A)



SECTION A-A

(SCALE A)



SECTION AT 6-6

(SCALE A)

NOTES:-

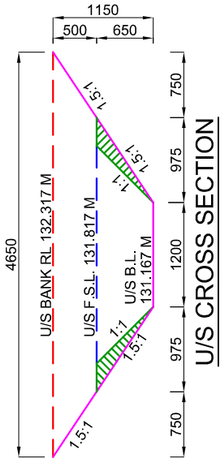
1. ALL DIMENSIONS ARE IN mm AND LEVELS IN METRES EXCEPT OTHERWISE MENTIONED.
2. THE DRAWING SHALL NOT BE SCALED OFF, ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. ALL CONCRETE WORK SHALL CONFORM TO IS: 456 -2000. GRADE OF CONCRETE IN DIFFERENT COMPONENTS SHALL BE AS FOLLOWS,

FLOOR	M 20
FOUNDATION OF ABUTMENTS & WING WALL	M 20
PCC UNDER FLOOR	M 15
ABUTMENTS / WING WALLS	M 20

4. ANY OVER DIGGING SHALL BE FILLED BY CONCRETE 1:3:6 GRADE.
5. SKIN REINFORCEMENT SHALL BE PROVIDED IN FLOOR AND ABUTMENT OF 12 MM DIA BARS @ 250 MM.

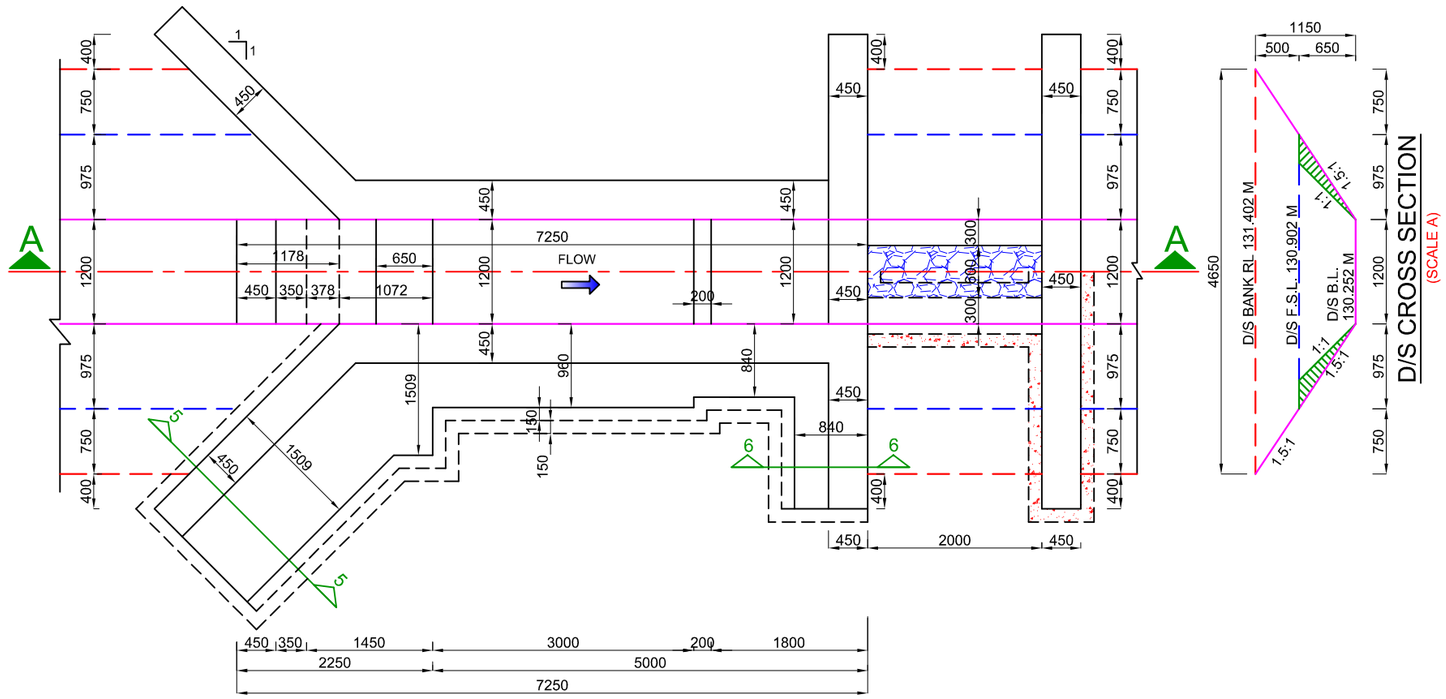
HYDRAULIC:- DATA

	U/S	D/S	UNIT
FULL SUPPLY DISCHARGE	0.350	0.350	CUMEC
VERTICAL DROP	0.915	0.915	METRE
FULL SUPPLY DEPTH	0.650	0.650	METRE
BED WIDTH	1.200	1.200	METRE
BED SLOPE	1 : 3500	1 : 3500	



U/S CROSS SECTION

(SCALE A)

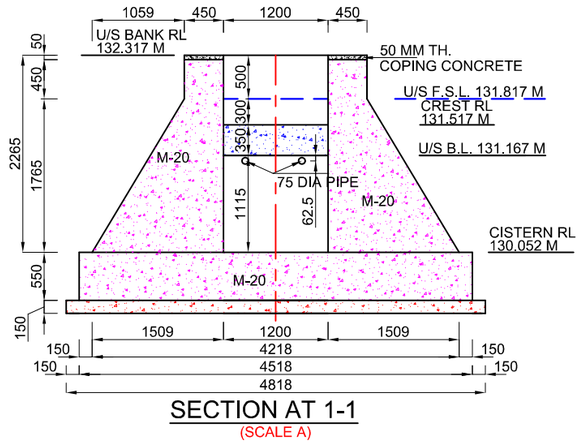


HALF TOP / HALF FOUNDATION PLAN

(SCALE A)

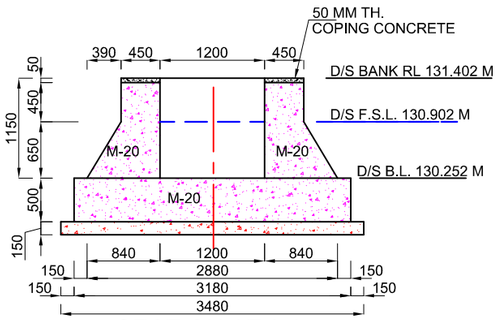
D/S CROSS SECTION

(SCALE A)



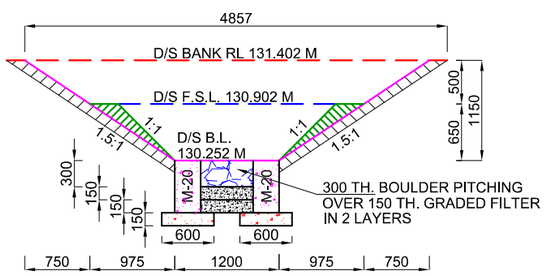
SECTION AT 1-1

(SCALE A)



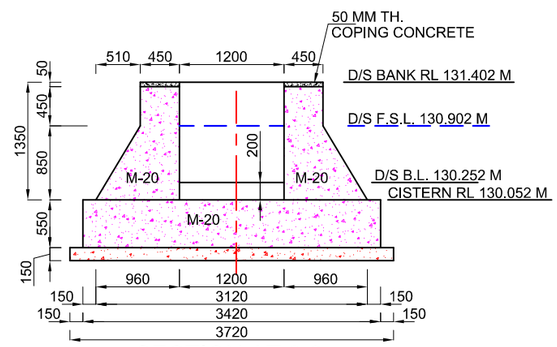
SECTION AT 3-3

(SCALE A)



SECTION AT 4-4

(SCALE A)



SECTION AT 2-2

(SCALE A)

SCALE A:-

1000 0 1000 2000 3000

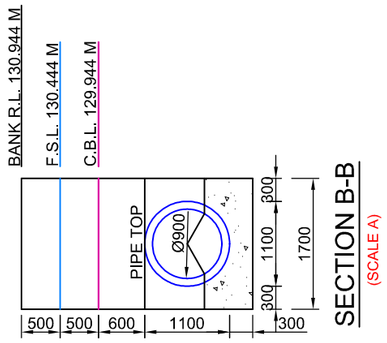
Prepared by :- WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	Drawing Title :-	SHARDA TYPE 0.915 M HT. FALL AT KM. 1.383 OF BHARTIPUR MINOR (OFFTAKE FROM RD - 101+900 KM., NORTH KOEL RIGHT MAIN CANAL)
	Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/ FALL 1 of 1

PROPOSED DESIGN DATA

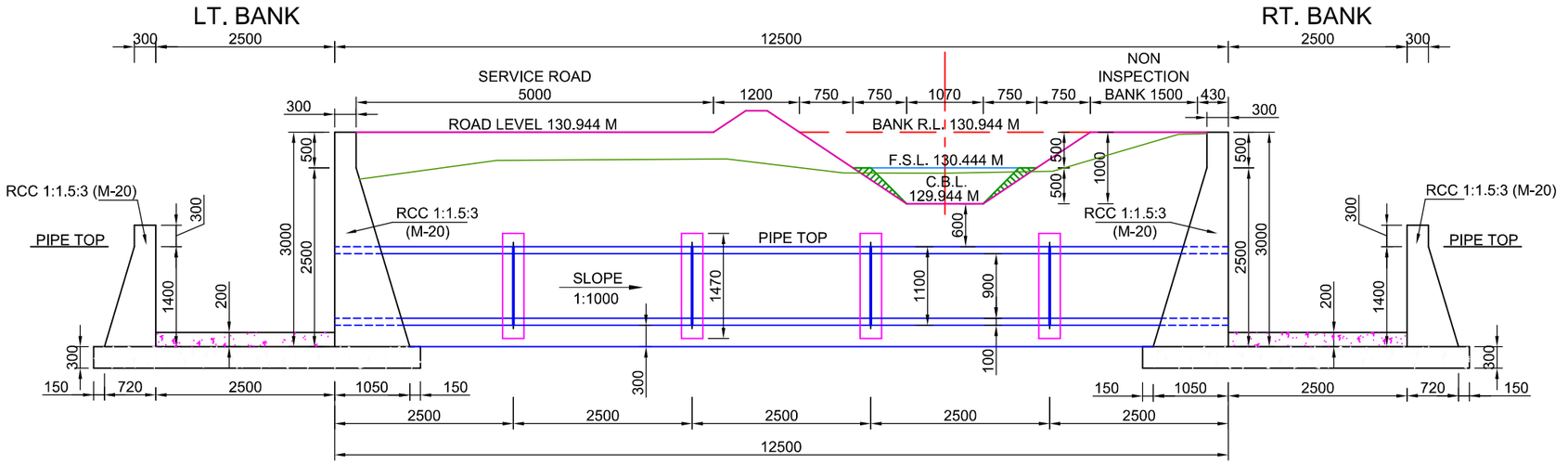
Discharge	0.21	cumec
Bed Width	1.070	m
Water Depth	0.500	m
Internal Dia	0.900	m
No. of Dia	1	Nos.
Free Board	0.500	m

NOTES:-

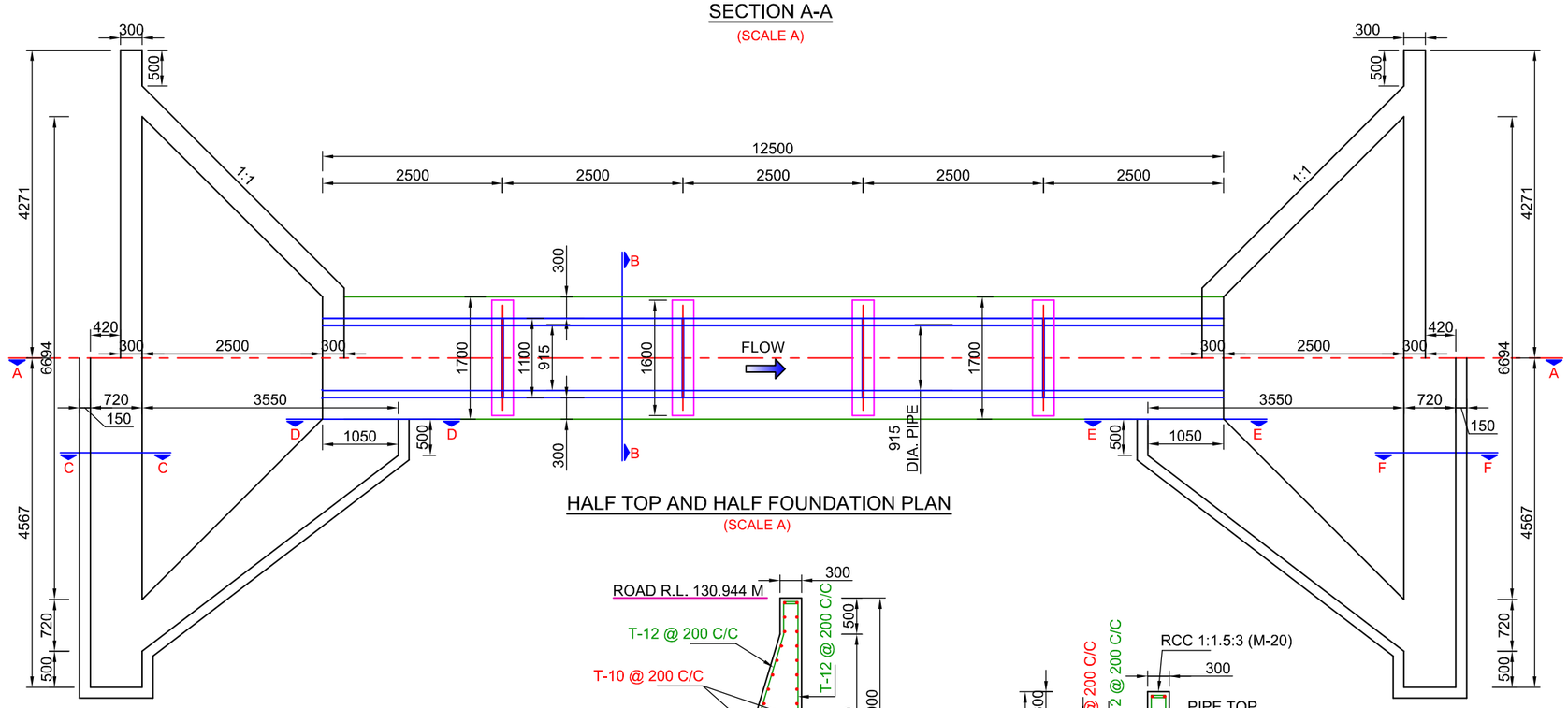
1. ALL DIMENSIONS ARE IN mm AND LEVELS IN METERS EXCEPT OTHERWISE MENTIONED.
2. THE DRAWING SHALL NOT TO BE SCALED OFF ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. ANY OVER DIGGING SHALL BE FILLED BY CONCRETE M-10
4. THE PIPES SHALL BE RCC NP3 NON PRESSURE PIPES. THE SPECIFICATION OF PIPES SHALL BE AS PER IS:458.
5. BENDING OF BARS SHALL CONFORM TO IS:2502.
6. ALL CONCRETE WORK SHALL CONFORM TO IS:456-2000. GRADE OF CONCRETE IN DIFF. COMPONENTS SHALL BE ASSHOWN ON DRAWINGS.
7. ALL REINFORCEMENT BARS SHALL BE OF HIGH YIELD STRENGTH DEFORMED BARS CONFORMING IS:786.



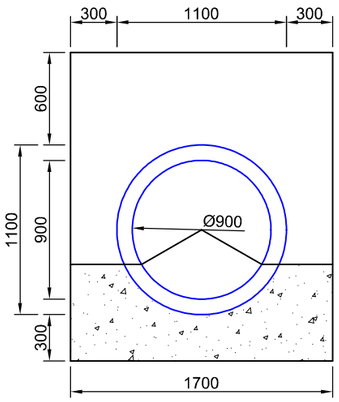
SECTION B-B
(SCALE A)



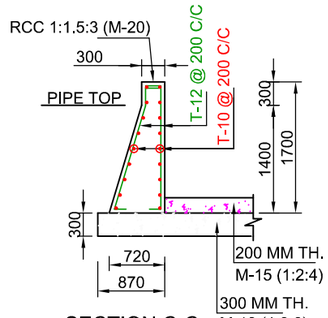
SECTION A-A
(SCALE A)



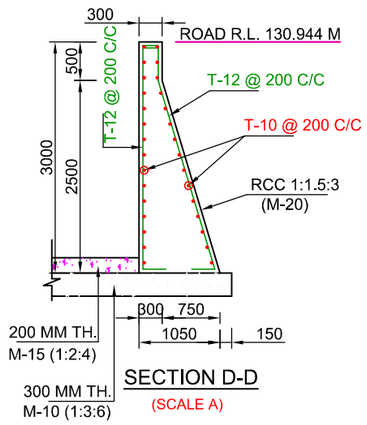
HALF TOP AND HALF FOUNDATION PLAN
(SCALE A)



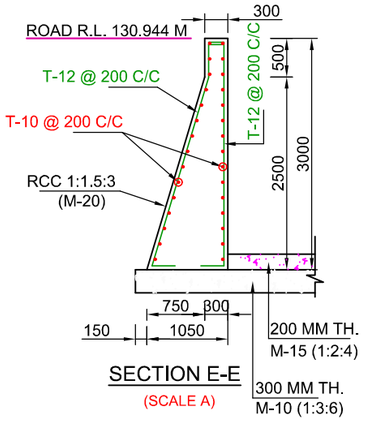
DETAILS OF JOINT OF PIPE
(SCALE B)



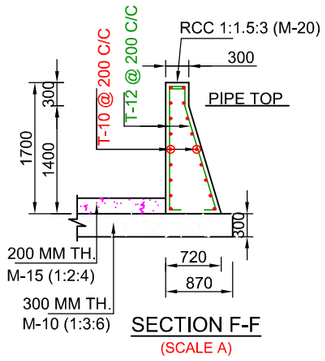
SECTION C-C
(SCALE A)



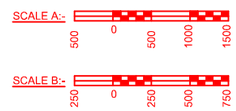
SECTION D-D
(SCALE A)



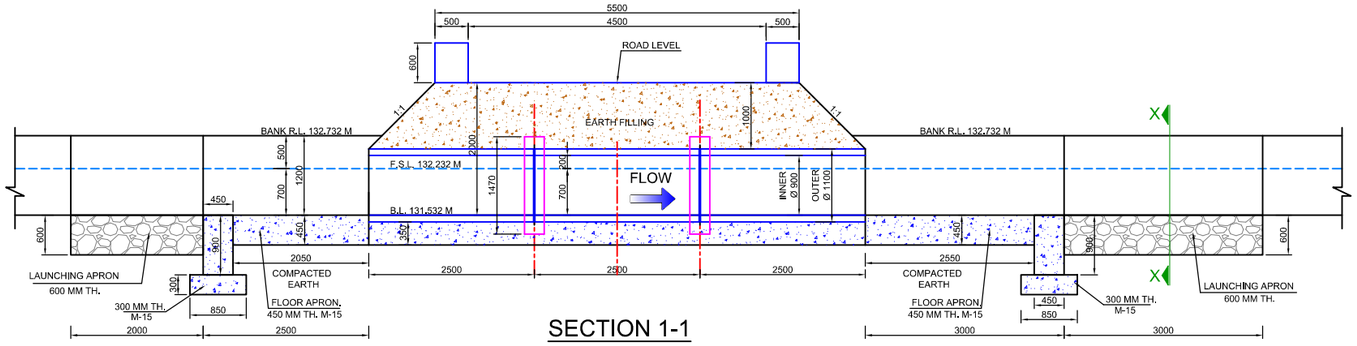
SECTION E-E
(SCALE A)



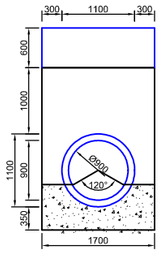
SECTION F-F
(SCALE A)



Prepared by :- WAPCOS LTD.	
Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
Drawing Title :-	GENERAL ARRANGEMENT DRAWING OF DRAINAGE SYPHON AT KM 2.462 OF BHARTIPUR MR.
Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/ CD 1 of 1



SECTION 1-1
(SCALE A)



DETAILS OF JOINT OF PIPE
(SCALE A)

DESIGN DATA:-

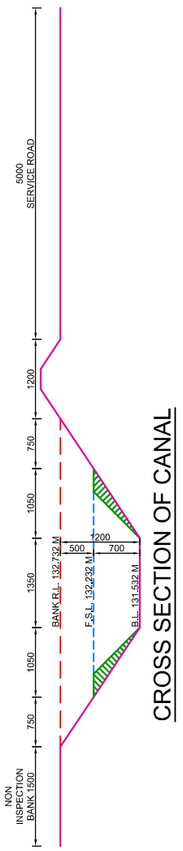
DISCHARGE	0.46 CUMEC
BED LEVEL	131.532 M
BED WIDTH	1.350 M
WATER DEPTH	0.700 M
FREE BOARD	0.500 M
CARRIAGE WAY	5.500 M
NO. OF PIPE	1 NOS.
SIDE SLOPE	1 IN 1
INTERNAL DIA OF PIPE	0.900 M

NOTES :-

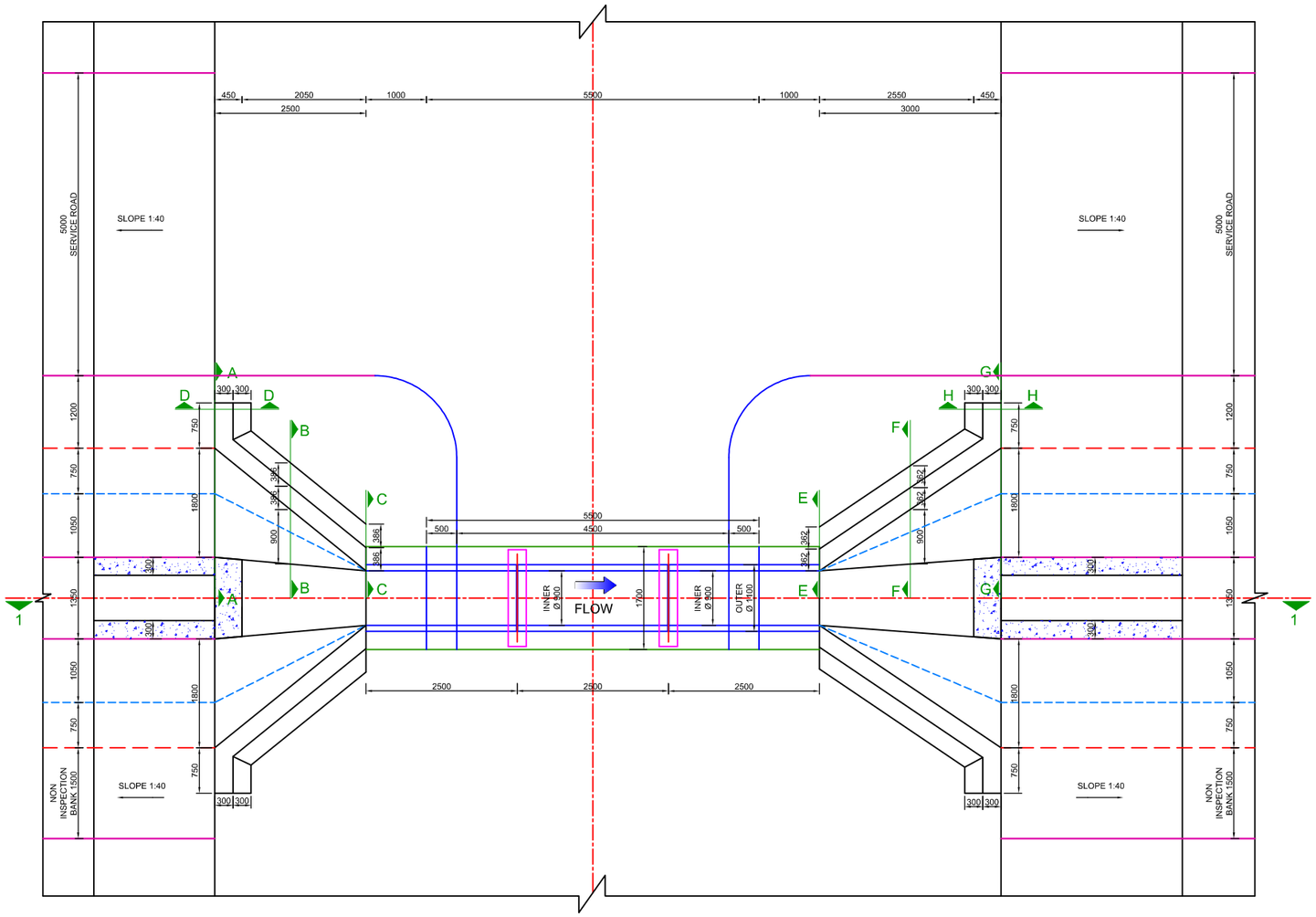
1. ALL DIMENSIONS ARE IN mm AND LEVELS IN METRES EXCEPT OTHERWISE MENTIONED.
2. THE DRAWING SHALL NOT TO BE SCALED OFF ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. ALL CONCRETE WORK SHALL CONFORM TO IS: 456, GRADE OF CONCRETE IN DIFFERENT COMPONENT SHALL BE
   TRANSITION WALL M-20
   BASE CONCRETE & CURTAIN WALL M-15

TRANSITIONS WALL

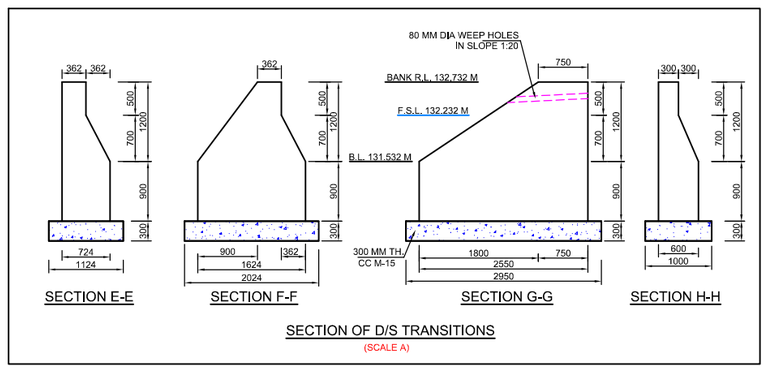
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2. THE DRAWING SHALL NOT TO BE SCALED OFF ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. WEEP HOLES WITH A DIAMETER OF 80MM, SPACED AT 1500MM IN A STAGGERED ARRANGEMENT, SHALL BE PROVIDED IN THE TRANSITION WALL WITH A 1:20 SLOPE TOWARDS THE CANAL TO ENSURE PROPER DRAINAGE.
4. SKIN REINFORCEMENT OF 12 Ø @250 MM C/C FOR TEMPERATURE STRESSES SHALL BE PROVIDED IN TRANSITIONS WALL.
5. MIN. CLEAR COVER TO ANY REINF. INCLUDING STIRRUPS SHALL BE 50 MM OR UNLESS OTHERWISE SPECIFIED.

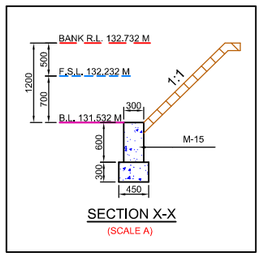


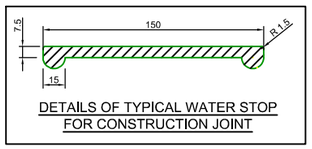
CROSS SECTION OF CANAL
(SCALE A)



LAYOUT PLAN
(SCALE A)



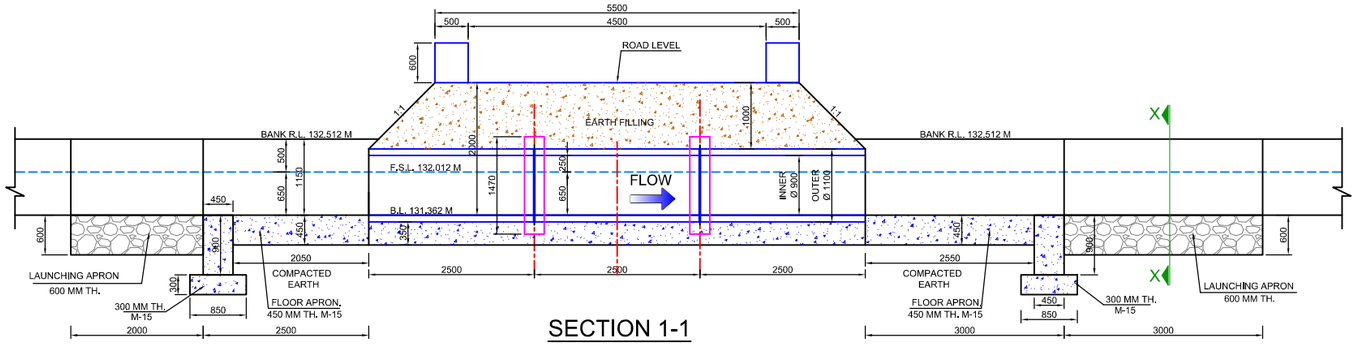




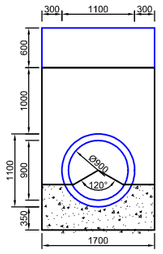
SCALE A:- 500 0 500 1000 1500

SCALE B:- 250 0 250 500 750

Prepared by :- WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	Drawing Title :-	GENERAL ARRANGEMENT DRAWING OF PIPE BRIDGE AT KM 0.106 OF BHARTIPUR MR.
	Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/PIPE BRG. 1 of 1



SECTION 1-1
(SCALE A)



DETAILS OF JOINT OF PIPE
(SCALE A)

DESIGN DATA:-

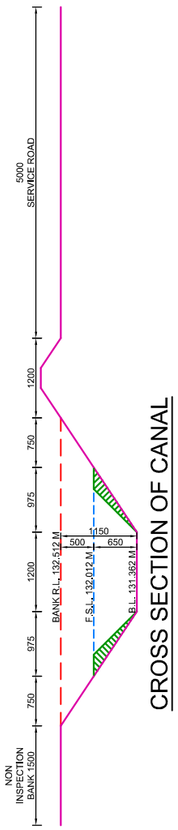
DISCHARGE	0.35 CUMEC
BED LEVEL	131.362 M
BED WIDTH	1.200 M
WATER DEPTH	0.650 M
FREE BOARD	0.500 M
CARRIAGE WAY	5.500 M
NO. OF PIPE	1 NOS.
SIDE SLOPE	1 IN 1
INTERNAL DIA OF PIPE	0.900 M

NOTES :-

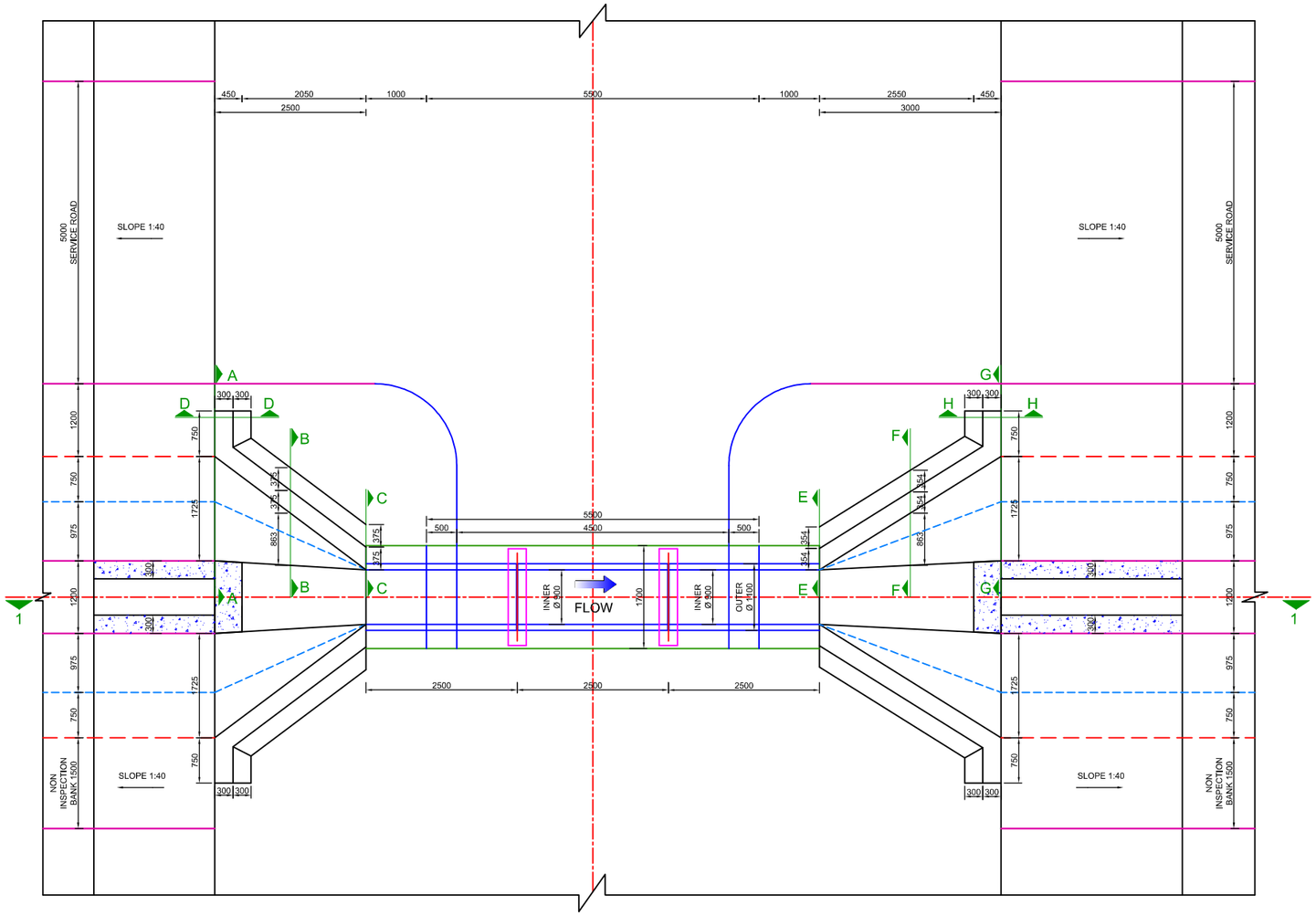
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3. ALL CONCRETE WORK SHALL CONFORM TO IS: 456, GRADE OF CONCRETE IN DIFFERENT COMPONENT SHALL BE
   TRANSITION WALL M-20
   BASE CONCRETE & CURTAIN WALL M-15

TRANSITIONS WALL

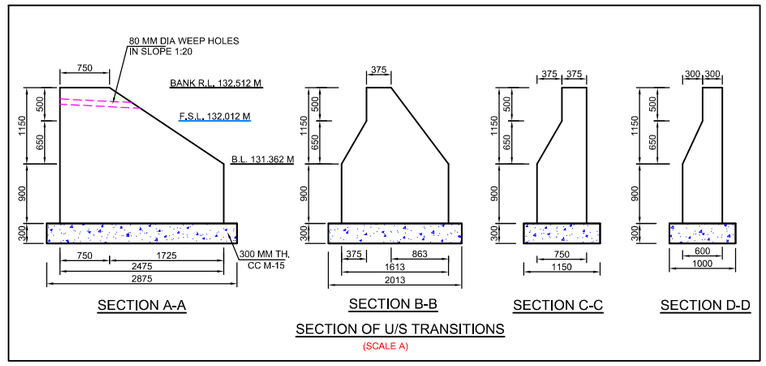
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4. SKIN REINFORCEMENT OF 12 Ø @250 MM C/C FOR TEMPERATURE STRESSES SHALL BE PROVIDED IN TRANSITIONS WALL.
5. MIN. CLEAR COVER TO ANY REINF. INCLUDING STIRRUPS SHALL BE 50 MM OR UNLESS OTHERWISE SPECIFIED.

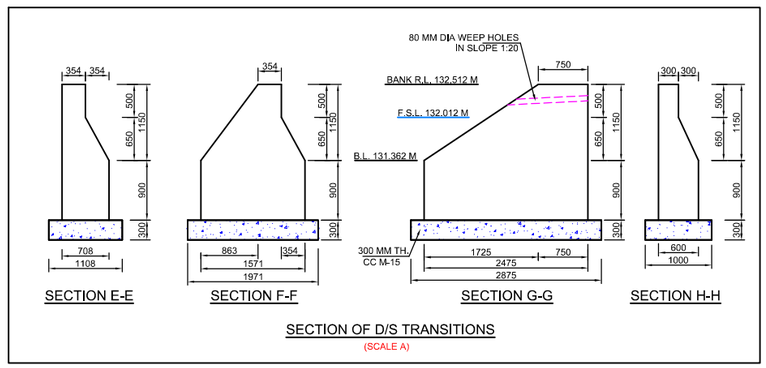


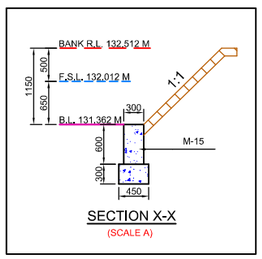
CROSS SECTION OF CANAL
(SCALE A)

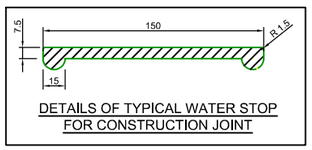


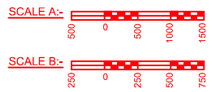
LAYOUT PLAN
(SCALE A)



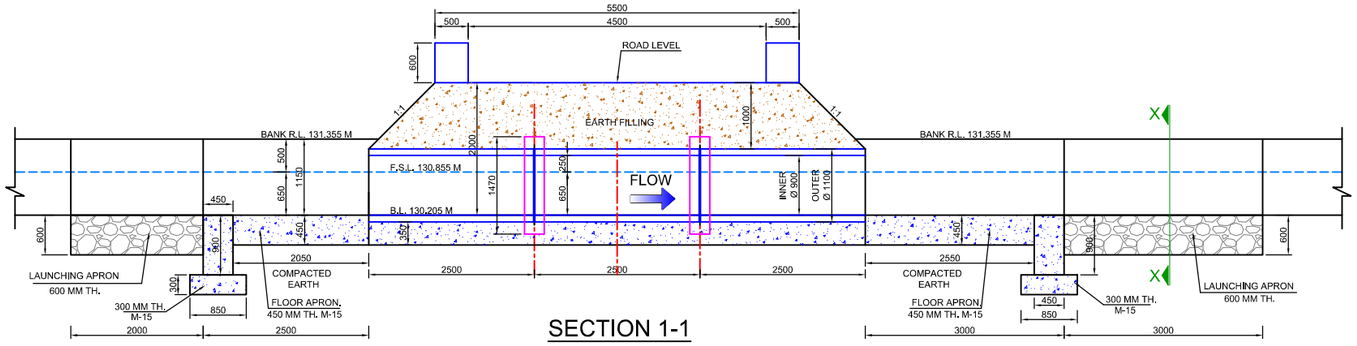




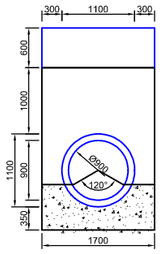




Prepared by :- WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	Drawing Title :-	GENERAL ARRANGEMENT DRAWING OF PIPE BRIDGE AT KM 0.700 OF BHARTIPUR MR.
	Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/PIPE BRG. 1 of 1



SECTION 1-1
(SCALE A)



DETAILS OF JOINT OF PIPE
(SCALE A)

DESIGN DATA:-

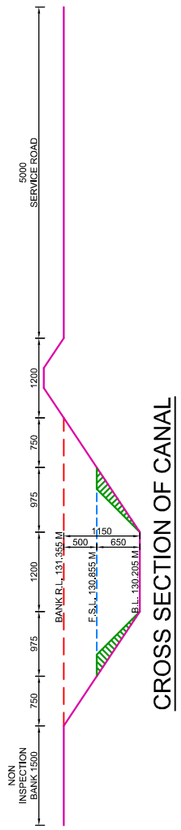
DISCHARGE	0.35 CUMEC
BED LEVEL	130.205 M
BED WIDTH	1.200 M
WATER DEPTH	0.650 M
FREE BOARD	0.500 M
CARRIAGE WAY	5.500 M
NO. OF PIPE	1 NOS.
SIDE SLOPE	1 IN 1
INTERNAL DIA OF PIPE	0.900 M

NOTES :-

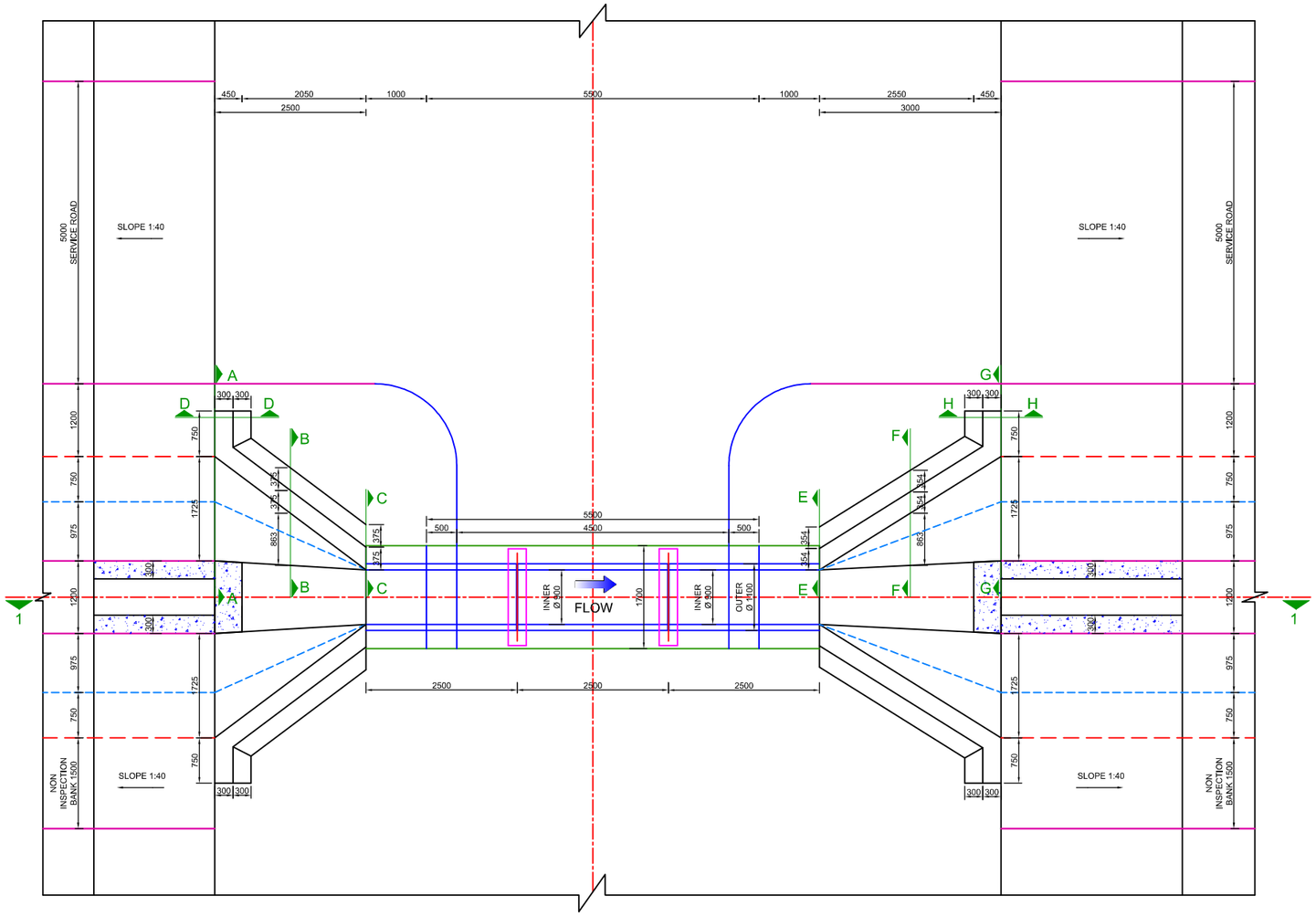
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   TRANSITION WALL M-20
   BASE CONCRETE & CURTAIN WALL M-15

TRANSITIONS WALL

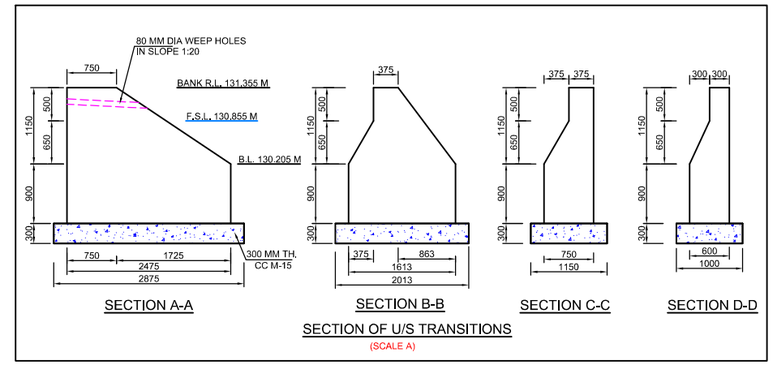
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4. SKIN REINFORCEMENT OF 12 Ø @250 MM C/C FOR TEMPERATURE STRESSES SHALL BE PROVIDED IN TRANSITIONS WALL.
5. MIN. CLEAR COVER TO ANY REINF. INCLUDING STIRRUPS SHALL BE 50 MM OR UNLESS OTHERWISE SPECIFIED.



CROSS SECTION OF CANAL
(SCALE A)

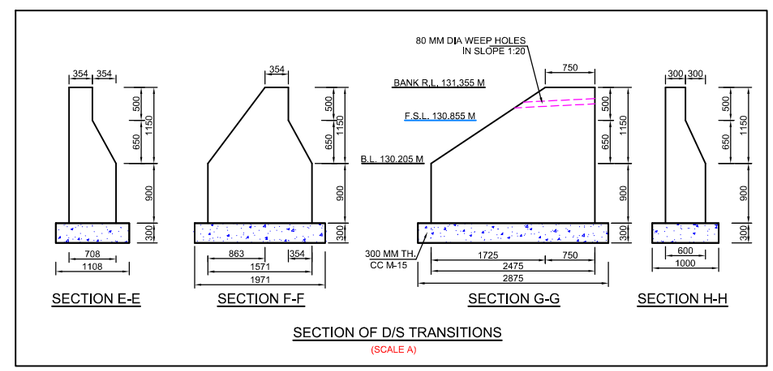


LAYOUT PLAN
(SCALE A)



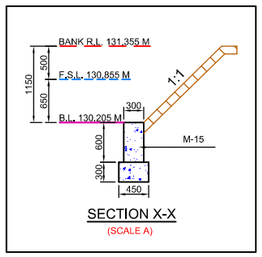
SECTION A-A | SECTION B-B | SECTION C-C | SECTION D-D

SECTION OF U/S TRANSITIONS
(SCALE A)

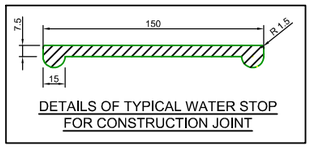


SECTION E-E | SECTION F-F | SECTION G-G | SECTION H-H

SECTION OF D/S TRANSITIONS
(SCALE A)



SECTION X-X
(SCALE A)

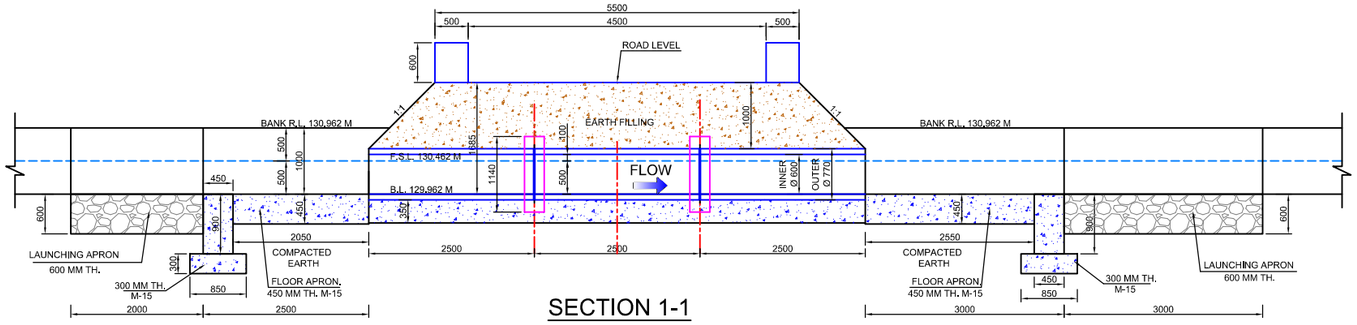


DETAILS OF TYPICAL WATER STOP FOR CONSTRUCTION JOINT

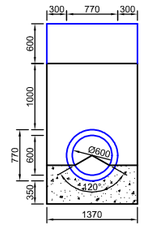
SCALE A:- 500 0 500 1000 1500

SCALE B:- 250 0 250 500 750

Prepared by :- WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	Drawing Title :-	GENERAL ARRANGEMENT DRAWING OF PIPE BRIDGE AT KM 1.550 OF BHARTIPUR MR.
	Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/PIPE BRG. 1 of 1



SECTION 1-1
(SCALE A)



DETAILS OF JOINT OF PIPE
(SCALE A)

DESIGN DATA:-

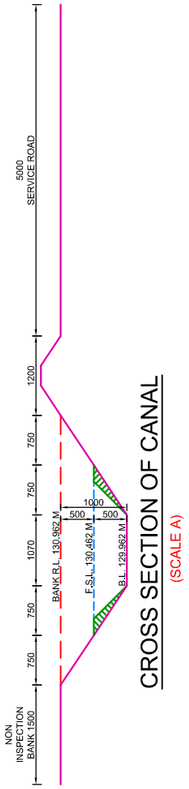
DISCHARGE	0.21 CUMEC
BED LEVEL	129.962 M
BED WIDTH	0.600 M
WATER DEPTH	0.350 M
FREE BOARD	0.500 M
CARRIAGE WAY	5.500 M
NO. OF PIPE	1 NOS.
SIDE SLOPE	1 IN 1
INTERNAL DIA OF PIPE	0.600 M

NOTES :-

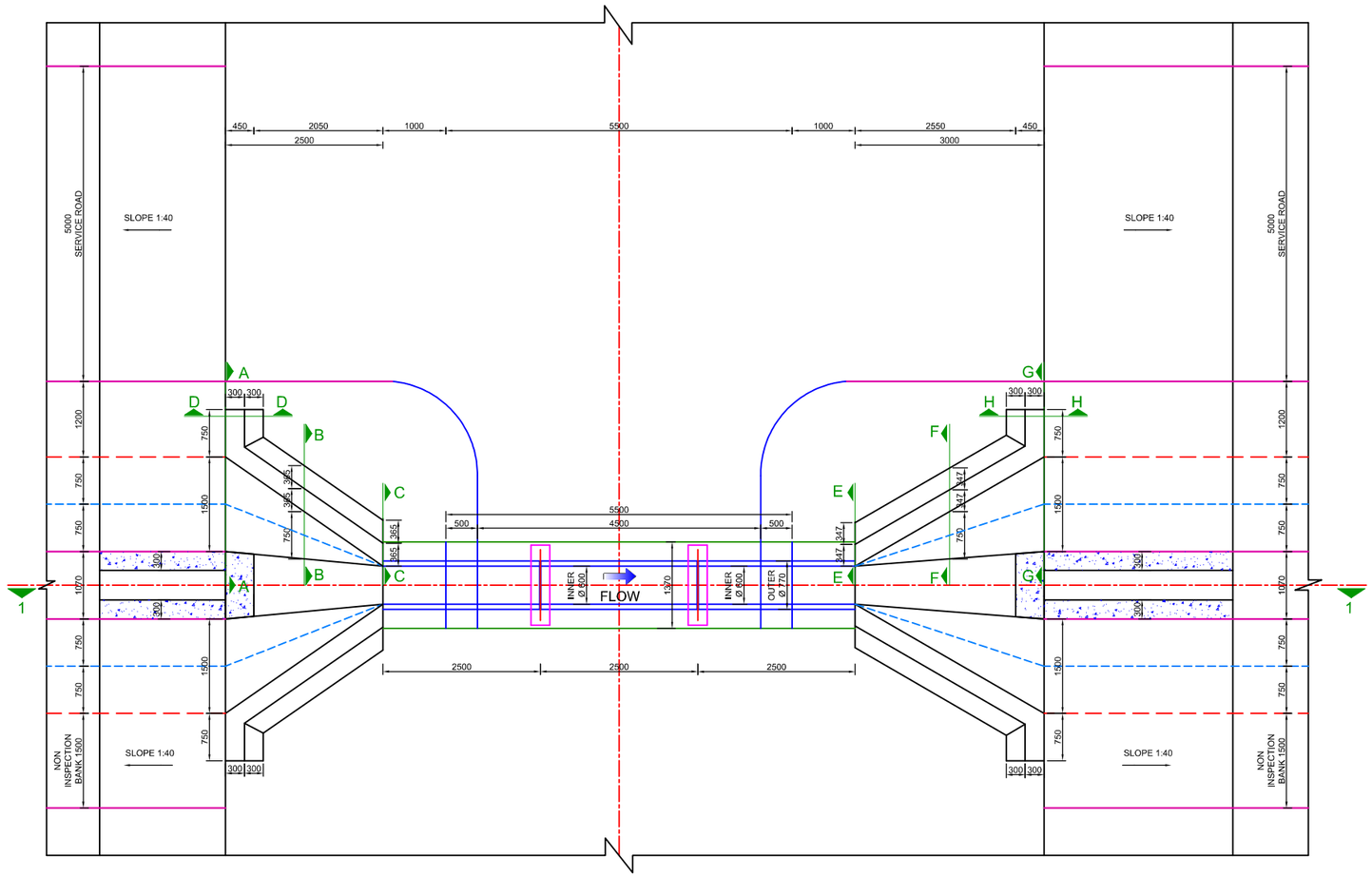
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   TRANSITION WALL M-20
   BASE CONCRETE & CURTAIN WALL M-15

TRANSITIONS WALL

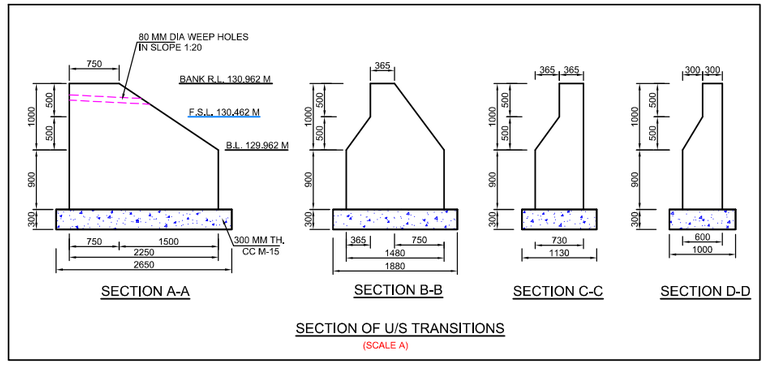
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4. SKIN REINFORCEMENT OF 12 Ø @250 MM C/C FOR TEMPERATURE STRESSES SHALL BE PROVIDED IN TRANSITIONS WALL.
5. MIN. CLEAR COVER TO ANY REINF. INCLUDING STIRRUPS SHALL BE 50 MM OR UNLESS OTHERWISE SPECIFIED.



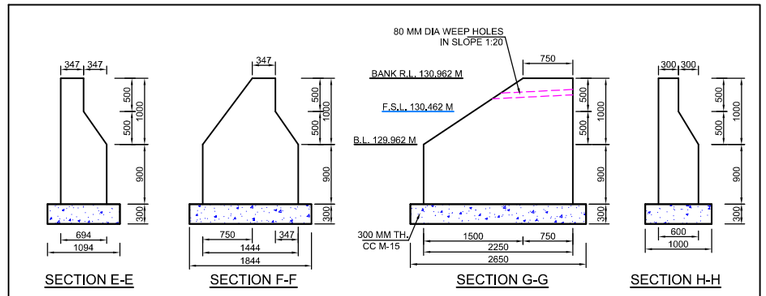
CROSS SECTION OF CANAL
(SCALE A)



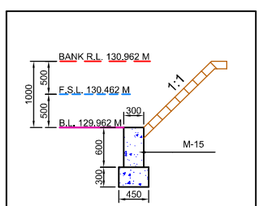
LAYOUT PLAN
(SCALE A)



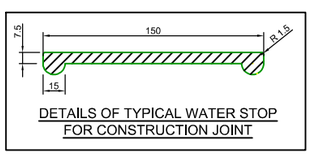
SECTION OF U/S TRANSITIONS
(SCALE A)



SECTION OF D/S TRANSITIONS
(SCALE A)



SECTION X-X
(SCALE A)

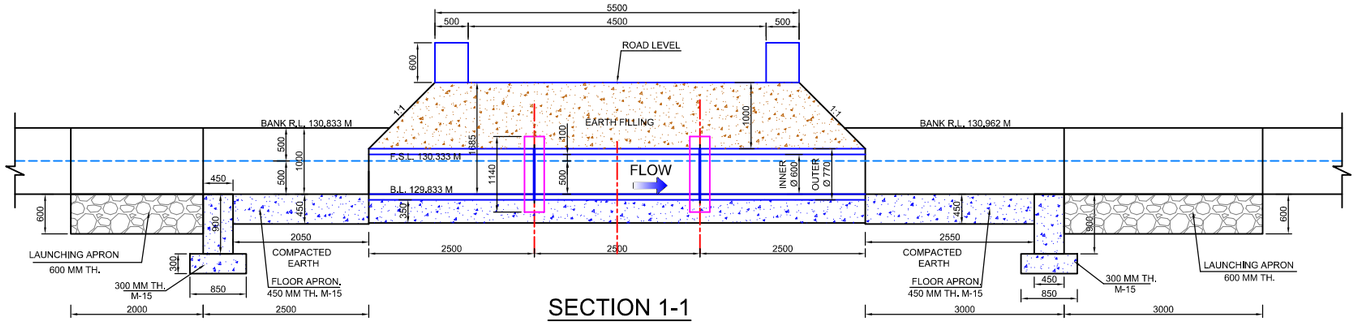


DETAILS OF TYPICAL WATER STOP FOR CONSTRUCTION JOINT

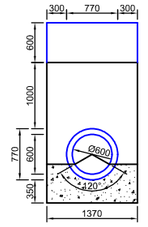
SCALE A:-
500 0 500 1000 1500

SCALE B:-
250 0 250 500 750

Prepared by :- WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	Drawing Title :-	GENERAL ARRANGEMENT DRAWING OF PIPE BRIDGE AT KM 2.400 OF MISHRICHAK MR.
	Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/PIPE BRG. 1 of 1



SECTION 1-1
(SCALE A)



DETAILS OF JOINT OF PIPE
(SCALE A)

DESIGN DATA:-

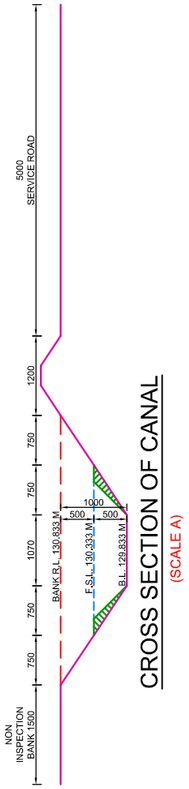
DISCHARGE	0.21 CUMEC
BED LEVEL	129.833 M
BED WIDTH	0.600 M
WATER DEPTH	0.350 M
FREE BOARD	0.500 M
CARRIAGE WAY	5.500 M
NO. OF PIPE	1 NOS.
SIDE SLOPE	1 IN 1
INTERNAL DIA OF PIPE	0.600 M

NOTES :-

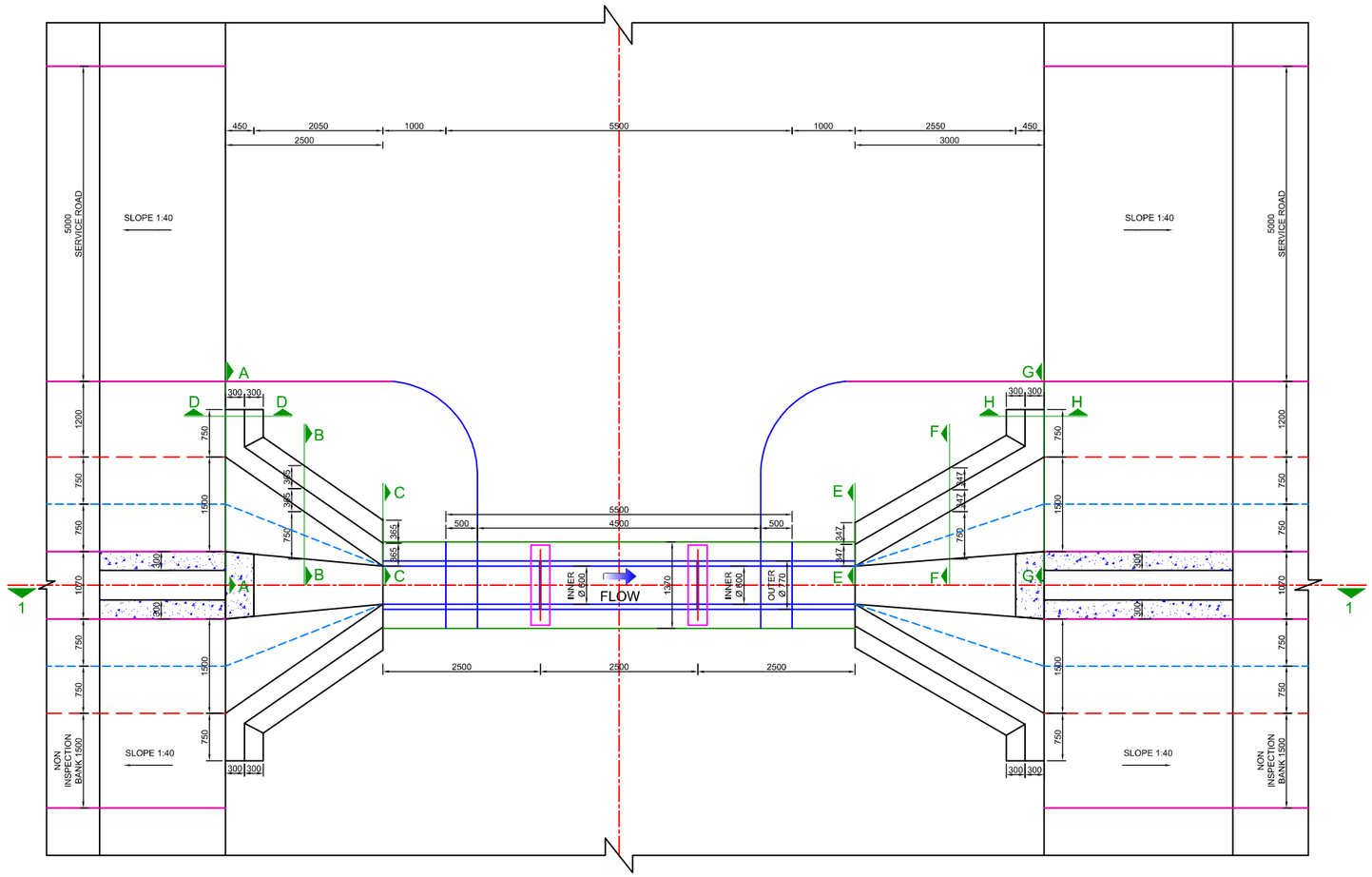
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   TRANSITION WALL M-20
   BASE CONCRETE & CURTAIN WALL M-15

TRANSITIONS WALL

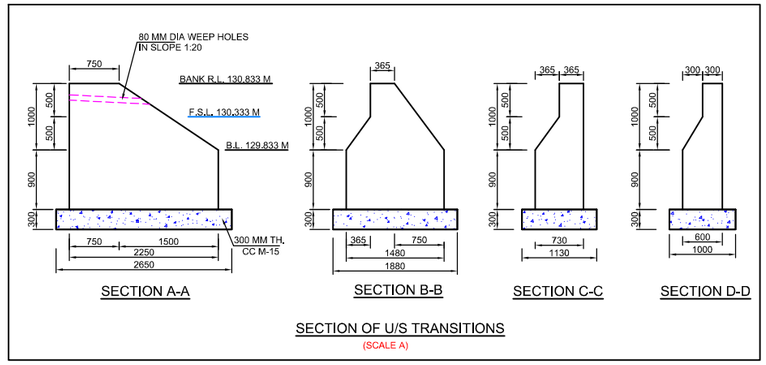
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4. SKIN REINFORCEMENT OF 12 Ø @250 MM C/C FOR TEMPERATURE STRESSES SHALL BE PROVIDED IN TRANSITIONS WALL.
5. MIN. CLEAR COVER TO ANY REINF. INCLUDING STIRRUPS SHALL BE 50 MM OR UNLESS OTHERWISE SPECIFIED.



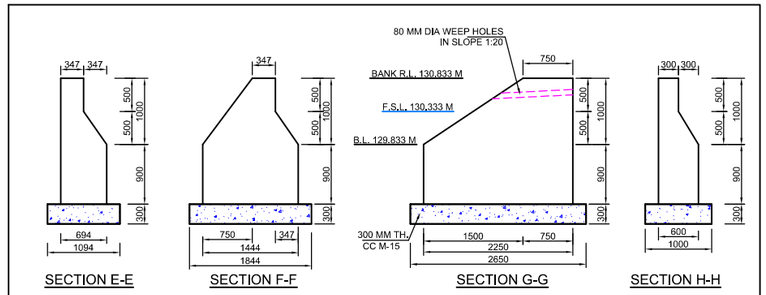
CROSS SECTION OF CANAL
(SCALE A)



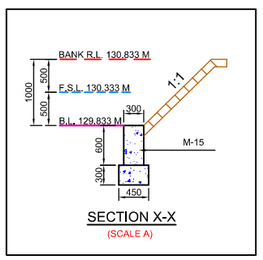
LAYOUT PLAN
(SCALE A)



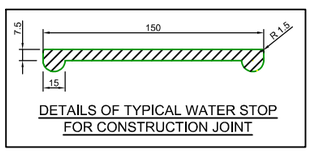
SECTION OF U/S TRANSITIONS
(SCALE A)



SECTION OF D/S TRANSITIONS
(SCALE A)



SECTION X-X
(SCALE A)

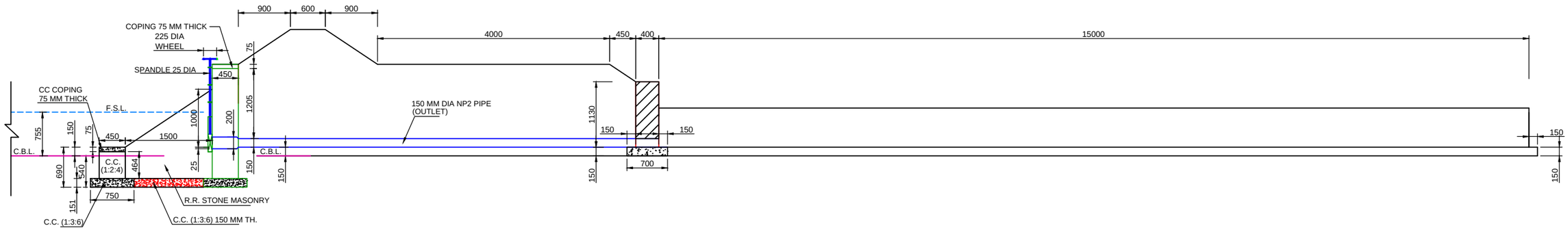


DETAILS OF TYPICAL WATER STOP FOR CONSTRUCTION JOINT

SCALE A:-
500 0 500 1000 1500

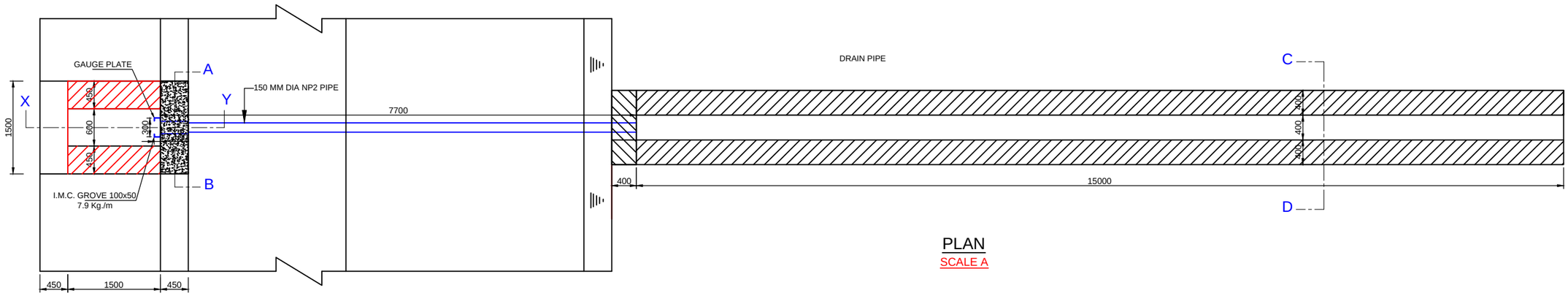
SCALE B:-
250 0 250 500 750

Prepared by :- WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	Drawing Title :-	GENERAL ARRANGEMENT DRAWING OF PIPE BRIDGE AT KM 2.850 OF MISHRICHAK MR.
	Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-36/PIPE BRG. 1 of 1

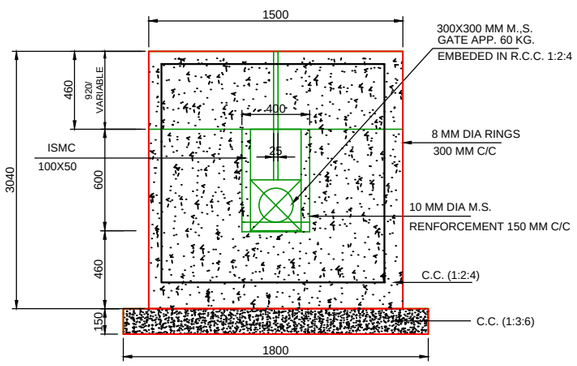


SECTION X-Y
SCALE A

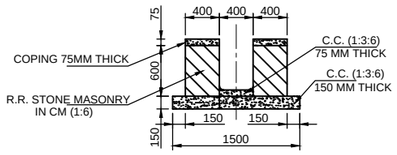
ELEVATION
SCALE A



PLAN
SCALE A



SECTION A-B
SCALE B



SECTION C-D
SCALE A

NOTES

1. ALL DIMENSIONS ARE IN MM EXCEPT LEVELS IN METRES UNLESS OTHERWISE SPECIFIED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. NO DIMENSION SHALL BE SCALED OFF.
2. ALL MASONRY WORKS SHALL BE DONE AS PER SPECIFICATION OF GOVT. OF BIHAR
3. THIS DWG. IS FOR OUTLET PIPE OF 150 MM DIA EMBEDED IN MASONRY.
4. 300X300 MM SIZE GATE SHALL BE FIXED IN ISMC. 100X50 FRAME.
5. THE GATE SHALL BE LIFTED THROUGH SPANDLE, THIS SPANDLE SHALL BE KEY LOCKED TO AVOID UNNECCESSARY OPERATION BY UN-AUTHORIZED PERSON.
6. THE 600 MM DIA DRAIN PIPE SHALL BE PROVIDED BELOW GULE DRAIN IF REQUIRED AT THE LOCATION.

SCALE A:- 0 1000 2000 3000 4000MM

SCALE B:- 0 2000 4000 6000 8000MM

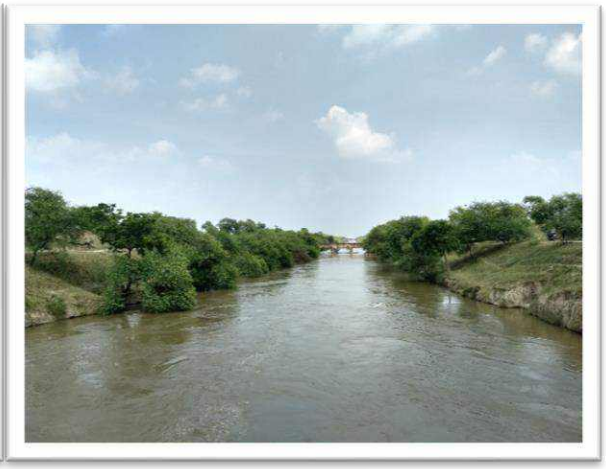
Prepared by :- WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	Drawing Title :-	TYPICAL OUTLET DRAWING
	Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ OUTLET 1 of 1
	Drawn by:-	Checked by:- / Approved by:-

NORTH KOEL RESERVOIR PROJECT

Completion of Balance Works of North Koel Reservoir Project

DRAWING REPORT – ANGRA BRANCH CANAL (OFFTAKING FROM RIGHT MAIN CANAL AT 103.66 KM)







WAPCOS LIMITED

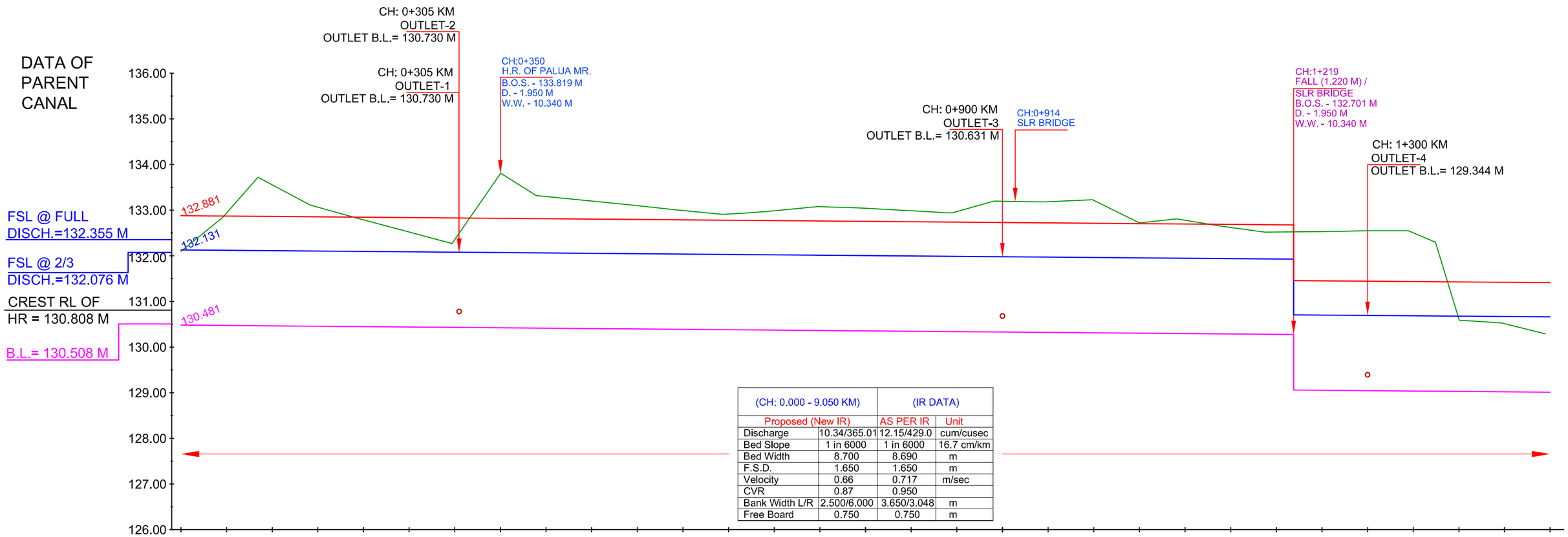
(GOVT. OF INDIA UNDERTAKING)

76- C SECTOR-18 INDUSTRIAL AREA, GURUGRAM-122015 (HARYANA)

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L-SECTION

L- SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)
FROM CH 0+000 TO 1+500



(CH: 0.000 - 9.050 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	10.34/365.01	12.15/429.0	cum/cusec
Bed Slope	1 in 6000	1 in 6000	16.7 cm/km
Bed Width	8.700	8.690	m
F.S.D.	1.650	1.650	m
Velocity	0.66	0.717	m/sec
CVR	0.87	0.950	
Bank Width L/R	2.500/6.000	3.650/3.048	m
Free Board	0.750	0.750	m

		0+000	0+050	0+100	0+150	0+200	0+250	0+300	0+350	0+400	0+450	0+500	0+550	0+600	0+650	0+700	0+750	0+800	0+850	0+900	0+950	1+000	1+050	1+100	1+150	1+200	1+250	1+300	1+350	1+400	1+450	1+500
DESIGN DATA	TOP OF BANK LEVEL	132.881	132.872	132.864	132.856	132.847	132.839	132.831	132.822	132.814	132.806	132.797	132.789	132.781	132.772	132.764	132.756	132.747	132.739	132.731	132.722	132.714	132.706	132.697	132.689	132.681	132.678	131.452	131.444	131.436	131.427	131.419	131.411
	F.S.L.	132.131	132.122	132.114	132.106	132.097	132.089	132.081	132.072	132.064	132.056	132.047	132.039	132.031	132.022	132.014	132.006	131.997	131.989	131.981	131.972	131.964	131.956	131.947	131.939	131.931	131.928 / 131.708	130.702	130.694	130.686	130.677	130.669	130.661
	Proposed Bed Level	130.481	130.472	130.464	130.456	130.447	130.439	130.431	130.422	130.414	130.406	130.397	130.389	130.381	130.372	130.364	130.356	130.347	130.339	130.331	130.322	130.314	130.306	130.297	130.289	130.281	130.278 / 129.058	129.052	129.044	129.036	129.027	129.019	129.011
EXISTING DATA	Bed Level																																
	TOP OF BANK LEVEL																																
	NSL	132.100	132.840	133.720	133.110	132.810	132.560	132.270	133.810	133.320	133.210	133.120	133.010	132.910	132.940	132.970	133.080	133.050	132.990	132.940	133.200	133.180	133.230	132.720	132.810	132.650	132.520	132.530	132.550	132.550	132.300	130.590	130.530	130.290
	Chainage IN KM	0+000	0+050	0+100	0+150	0+200	0+250	0+300	0+350	0+400	0+450	0+500	0+550	0+600	0+650	0+700	0+750	0+800	0+850	0+900	0+950	1+000	1+050	1+100	1+150	1+200	1+250	1+300	1+350	1+400	1+450	1+500

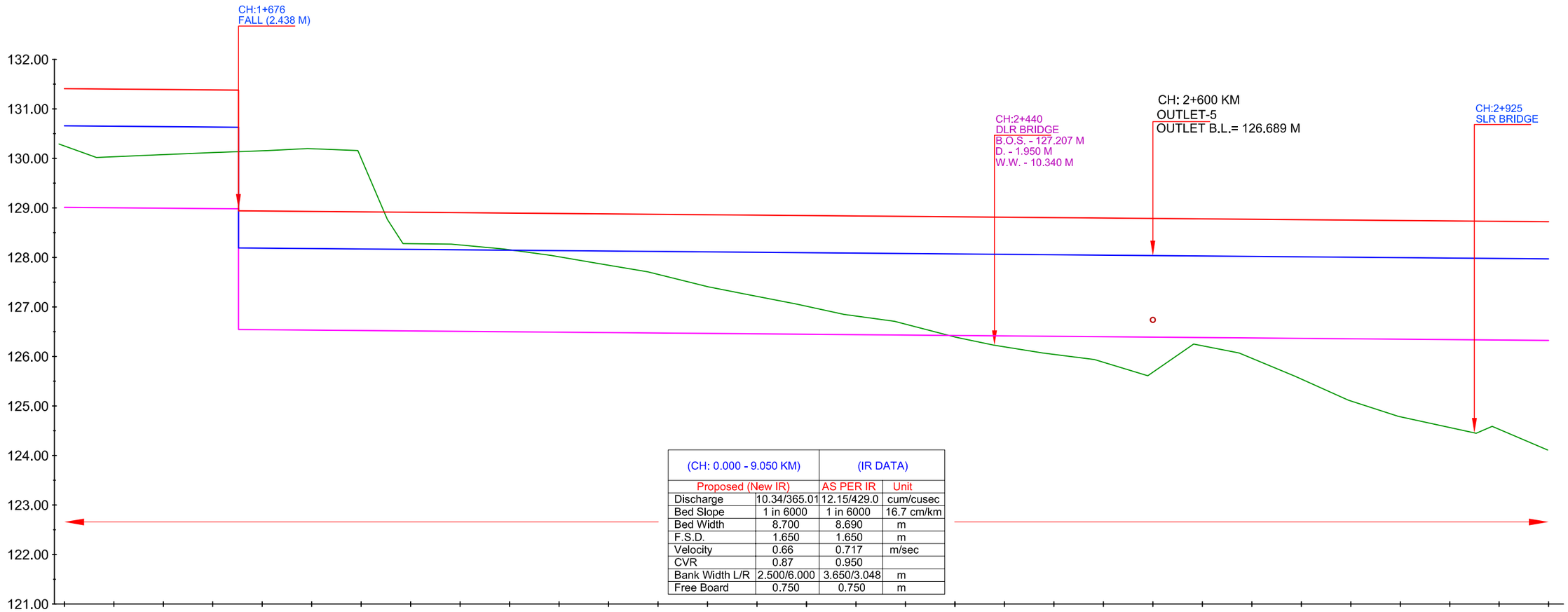
LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF ANGRA BRANCH CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ LSEC- 01 of 25

L- SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)
FROM CH 1+500 TO 3+000



(CH: 0.000 - 9.050 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	10.34/365.01	12.15/429.0	cum/cusec
Bed Slope	1 in 6000	1 in 6000	16.7 cm/km
Bed Width	8.700	8.690	m
F.S.D.	1.650	1.650	m
Velocity	0.66	0.717	m/sec
CVR	0.87	0.950	
Bank Width L/R	2.500/6.000	3.650/3.048	m
Free Board	0.750	0.750	m

		1+500	1+550	1+600	1+650	1+700	1+750	1+800	1+850	1+900	1+950	2+000	2+050	2+100	2+150	2+200	2+250	2+300	2+350	2+400	2+450	2+500	2+550	2+600	2+650	2+700	2+750	2+800	2+850	2+900	2+950	3+000
DESIGN DATA	TOP OF BANK LEVEL	131.411	131.402	131.394	131.386	131.381	128.943	128.939	128.931	128.923	128.914	128.906	128.898	128.889	128.881	128.873	128.864	128.856	128.848	128.839	128.831	128.823	128.814	128.806	128.798	128.789	128.781	128.773	128.764	128.756	128.748	128.739	128.731	128.723
	F.S.L.	130.661	130.652	130.644	130.636	130.631	128.193	128.189	128.181	128.173	128.164	128.156	128.148	128.139	128.131	128.123	128.114	128.106	128.098	128.089	128.081	128.073	128.064	128.056	128.048	128.039	128.031	128.023	128.014	128.006	127.998	127.989	127.981	127.973
	Proposed Bed Level	129.011	129.002	128.994	128.986	128.981	126.543	126.539	126.531	126.523	126.514	126.506	126.498	126.489	126.481	126.473	126.464	126.456	126.448	126.439	126.431	126.423	126.414	126.406	126.398	126.389	126.381	126.373	126.364	126.356	126.348	126.339	126.331	126.323
EXISTING DATA	Bed Level																																	
	TOP OF BANK LEVEL																																	
	NSL	130.290	130.020	130.070	130.120	130.160	130.200	130.160	128.770	128.280	128.270	128.170	128.040	127.880	127.710	127.410	127.260	127.060	126.850	126.710	126.390	126.230	126.070	125.940	125.610	126.250	126.070	125.600	125.120	124.790	124.450	124.590	124.110	
	Chainage IN KM	1+500	1+550	1+600	1+650	1+700	1+750	1+800	1+850	1+900	1+950	2+000	2+050	2+100	2+150	2+200	2+250	2+300	2+350	2+400	2+450	2+500	2+550	2+600	2+650	2+700	2+750	2+800	2+850	2+900	2+950	3+000

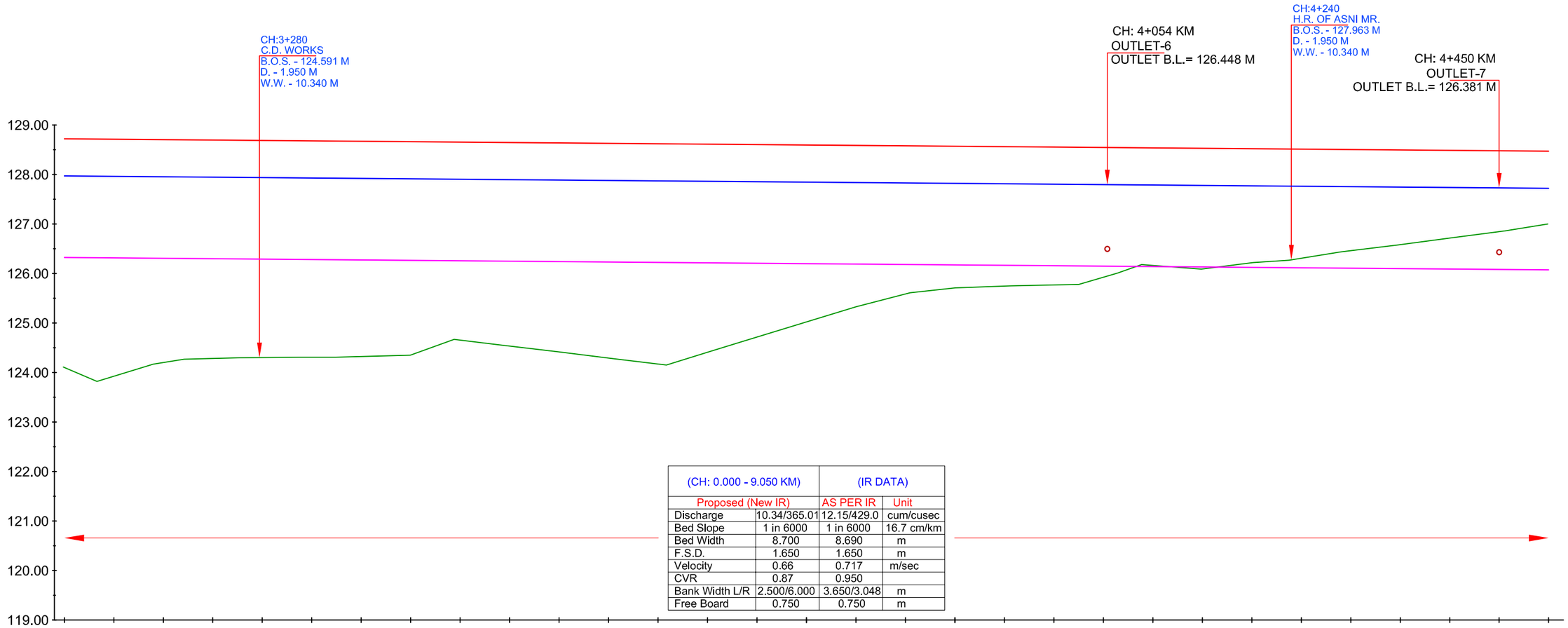
LEGEND

NSL		EXISTING BED LEVEL	
EXISTING TOP OF BANK		PROPOSED BED LEVEL	
EXISTING FALL		PROPOSED FSL	
MODIFIED FALL		PROPOSED TOP OF BANK LEVEL	
NEW FALL			

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF ANGRA BRANCH CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ LSEC- 02 of 25

L- SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)
FROM CH 3+000 TO 4+500



(CH: 0.000 - 9.050 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	10.34/365.01	12.15/429.0	cum/cusec
Bed Slope	1 in 6000	1 in 6000	16.7 cm/km
Bed Width	8.700	8.690	m
F.S.D.	1.650	1.650	m
Velocity	0.66	0.717	m/sec
CVR	0.87	0.950	
Bank Width L/R	2.500/6.000	3.650/3.048	m
Free Board	0.750	0.750	m

		3+000	3+050	3+100	3+150	3+200	3+250	3+300	3+350	3+400	3+450	3+500	3+550	3+600	3+650	3+700	3+750	3+800	3+850	3+900	3+950	4+000	4+050	4+100	4+150	4+200	4+250	4+300	4+350	4+400	4+450	4+500
DESIGN DATA	TOP OF BANK LEVEL	128.723	128.714	128.706	128.698	128.689	128.681	128.673	128.664	128.656	128.648	128.639	128.631	128.623	128.614	128.606	128.598	128.589	128.581	128.573	128.564	128.556	128.548	128.539	128.531	128.523	128.514	128.506	128.498	128.489	128.481	128.473
	F.S.L.	127.973	127.964	127.956	127.948	127.939	127.931	127.923	127.914	127.906	127.898	127.889	127.881	127.873	127.864	127.856	127.848	127.839	127.831	127.823	127.814	127.806	127.798	127.789	127.781	127.773	127.764	127.756	127.748	127.739	127.731	127.723
	Proposed Bed Level	126.323	126.314	126.306	126.298	126.289	126.281	126.273	126.264	126.256	126.248	126.239	126.231	126.223	126.214	126.206	126.198	126.189	126.181	126.173	126.164	126.156	126.148	126.139	126.131	126.123	126.114	126.106	126.098	126.089	126.081	126.073
EXISTING DATA	Bed Level																															
	TOP OF BANK LEVEL																															
	NSL	124.110	123.820		124.170	124.270		124.300		124.310	124.310			124.350		124.670	124.560		124.420		124.280		124.150	124.410	124.630		125.010		125.330		125.610	125.710		125.750		125.780		126.010	126.180		126.090		126.220	126.270		126.440		126.580		126.720		126.860		127.000
	Chainage IN KM	3+000	3+050	3+100	3+150	3+200	3+250	3+300	3+350	3+400	3+450	3+500	3+550	3+600	3+650	3+700	3+750	3+800	3+850	3+900	3+950	4+000	4+050	4+100	4+150	4+200	4+250	4+300	4+350	4+400	4+450	4+500

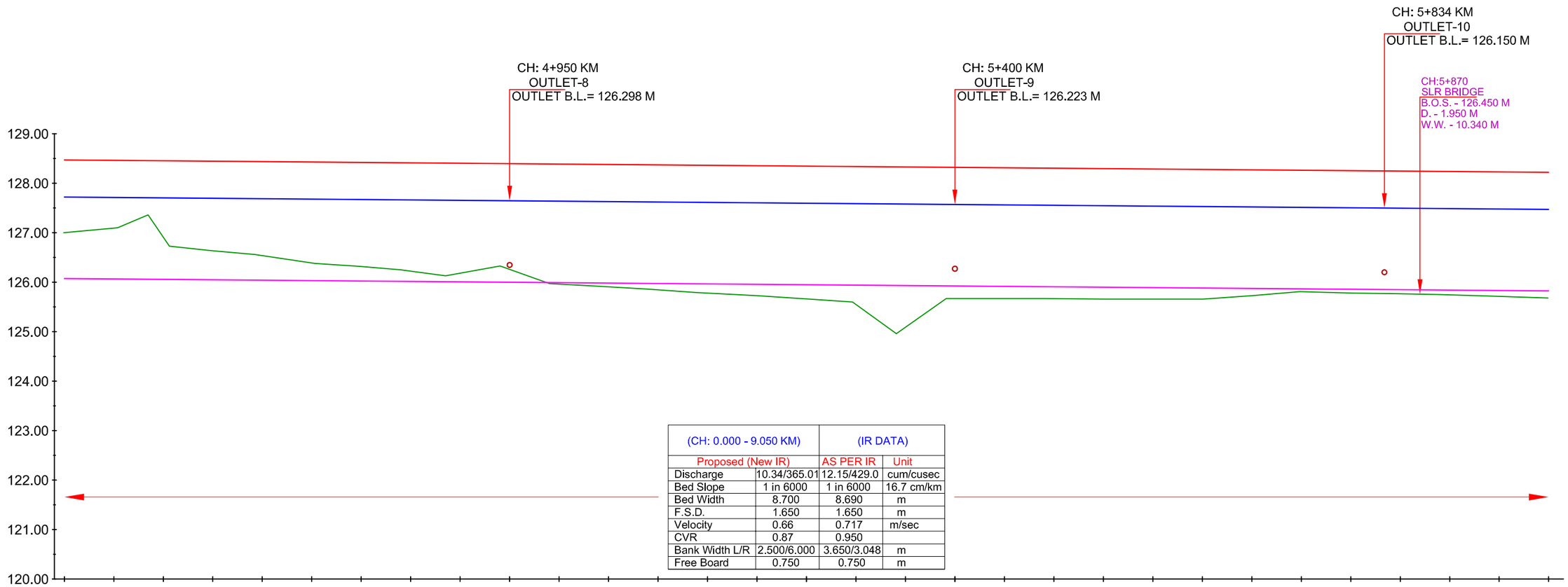
LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF ANGRA BRANCH CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ LSEC- 03 of 25

L- SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)
FROM CH 4+500 TO 6+000



(CH: 0.000 - 9.050 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	10.34/365.01	12.15/429.0	cum/cusec
Bed Slope	1 in 6000	1 in 6000	16.7 cm/km
Bed Width	8.700	8.690	m
F.S.D.	1.650	1.650	m
Velocity	0.66	0.717	m/sec
CVR	0.87	0.950	
Bank Width L/R	2.500/6.000	3.650/3.048	m
Free Board	0.750	0.750	m

		4+500	4+550	4+600	4+650	4+700	4+750	4+800	4+850	4+900	4+950	5+000	5+050	5+100	5+150	5+200	5+250	5+300	5+350	5+400	5+450	5+500	5+550	5+600	5+650	5+700	5+750	5+800	5+850	5+900	5+950	6+000
DESIGN DATA	TOP OF BANK LEVEL	128.473	128.464	128.456	128.448	128.439	128.431	128.423	128.414	128.406	128.398	128.389	128.381	128.373	128.364	128.356	128.348	128.339	128.331	128.323	128.314	128.306	128.298	128.289	128.281	128.273	128.264	128.256	128.248	128.239	128.231	128.223
	F.S.L.	127.723	127.714	127.706	127.698	127.689	127.681	127.673	127.664	127.656	127.648	127.639	127.631	127.623	127.614	127.606	127.598	127.589	127.581	127.573	127.564	127.556	127.548	127.539	127.531	127.523	127.514	127.506	127.498	127.489	127.481	127.473
	Proposed Bed Level	126.073	126.064	126.056	126.048	126.039	126.031	126.023	126.014	126.006	125.998	125.989	125.981	125.973	125.964	125.956	125.948	125.939	125.931	125.923	125.914	125.906	125.898	125.889	125.881	125.873	125.864	125.856	125.848	125.839	125.831	125.823
EXISTING DATA	Bed Level																															
	TOP OF BANK LEVEL																															
	NSL	127.000	127.100	127.360	126.730	126.640	126.560	126.380	126.320	126.250	126.130	126.330	125.970	125.920	125.860	125.790	125.730	125.660	125.600	124.960	125.670	125.670	125.670	125.660	125.660	125.660	125.730	125.810	125.780	125.770	125.750	125.720	125.680
	Chainage IN KM	4+500	4+550	4+600	4+650	4+700	4+750	4+800	4+850	4+900	4+950	5+000	5+050	5+100	5+150	5+200	5+250	5+300	5+350	5+400	5+450	5+500	5+550	5+600	5+650	5+700	5+750	5+800	5+850	5+900	5+950	6+000

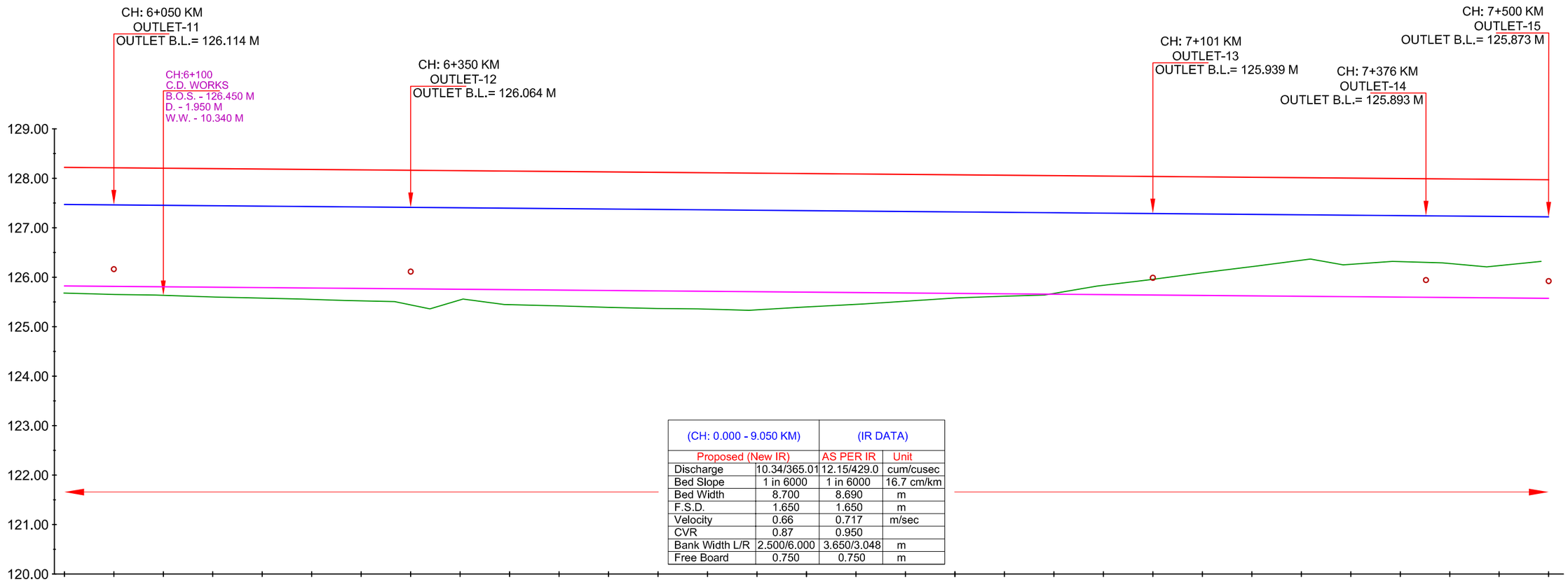
LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF ANGRA BRANCH CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ LSEC- 04 of 25

L- SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)
FROM CH 6+000 TO 7+500



(CH: 0.000 - 9.050 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	10.34/365.01	12.15/429.0	cum/cusec
Bed Slope	1 in 6000	1 in 6000	16.7 cm/km
Bed Width	8.700	8.690	m
F.S.D.	1.650	1.650	m
Velocity	0.66	0.717	m/sec
CVR	0.87	0.950	
Bank Width L/R	2.500/6.000	3.650/3.048	m
Free Board	0.750	0.750	m

		6+000	6+050	6+100	6+150	6+200	6+250	6+300	6+350	6+400	6+450	6+500	6+550	6+600	6+650	6+700	6+750	6+800	6+850	6+900	6+950	7+000	7+050	7+100	7+150	7+200	7+250	7+300	7+350	7+400	7+450	7+500
DESIGN DATA	TOP OF BANK LEVEL	128.223	128.214	128.206	128.198	128.189	128.181	128.173	128.164	128.156	128.148	128.139	128.131	128.123	128.114	128.106	128.098	128.089	128.081	128.073	128.064	128.056	128.048	128.039	128.031	128.023	128.014	128.006	127.998	127.989	127.981	127.973
	F.S.L.	127.473	127.464	127.456	127.448	127.439	127.431	127.423	127.414	127.406	127.398	127.389	127.381	127.373	127.364	127.356	127.348	127.339	127.331	127.323	127.314	127.306	127.298	127.289	127.281	127.273	127.264	127.256	127.248	127.239	127.231	127.223
	Proposed Bed Level	125.823	125.814	125.806	125.798	125.789	125.781	125.773	125.764	125.756	125.748	125.739	125.731	125.723	125.714	125.706	125.698	125.689	125.681	125.673	125.664	125.656	125.648	125.639	125.631	125.623	125.614	125.606	125.598	125.589	125.581	125.573
EXISTING DATA	Bed Level																															
	TOP OF BANK LEVEL																															
	NSL	125.680	125.650	125.640	125.600	125.580	125.560	125.530	125.510	125.360	125.560	125.450	125.420	125.390	125.370	125.360	125.330	125.390	125.460	125.520	125.580	125.620	125.640	125.820	125.950	126.100	126.230	126.370	126.250	126.320	126.290	126.210	126.320
	Chainage IN KM	6+000	6+050	6+100	6+150	6+200	6+250	6+300	6+350	6+400	6+450	6+500	6+550	6+600	6+650	6+700	6+750	6+800	6+850	6+900	6+950	7+000	7+050	7+100	7+150	7+200	7+250	7+300	7+350	7+400	7+450	7+500

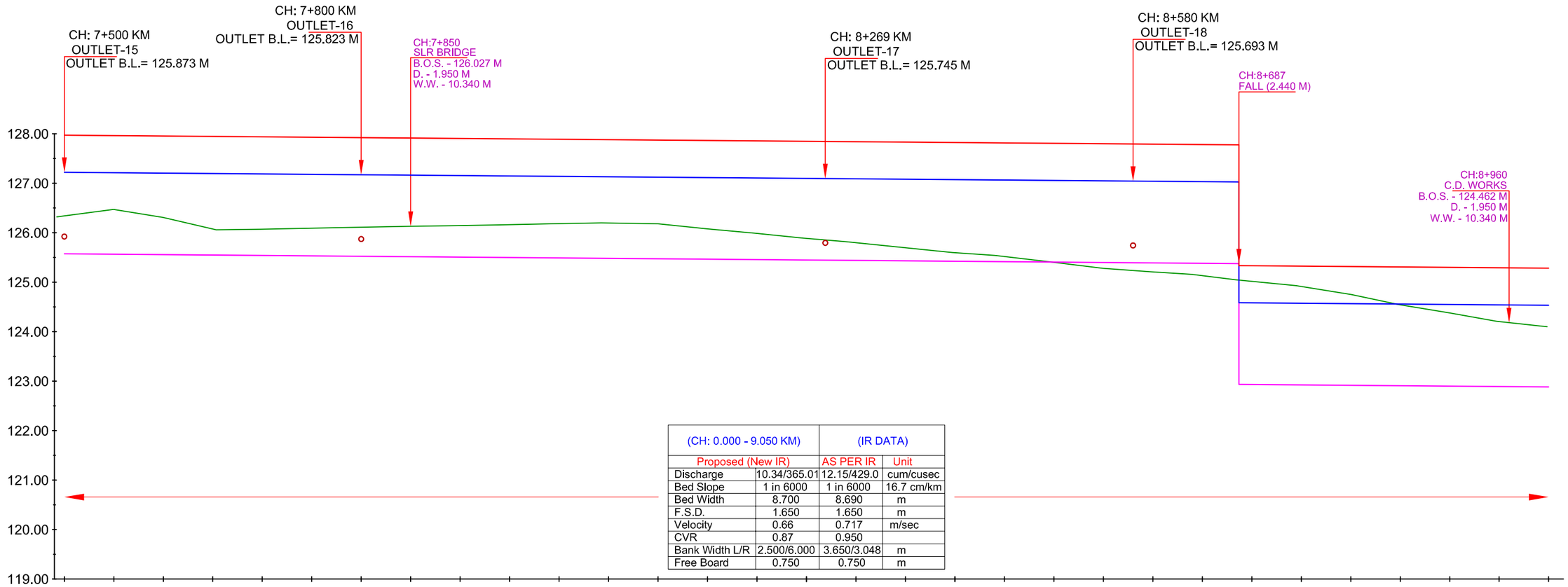
LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF ANGRA BRANCH CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ LSEC- 05 of 25

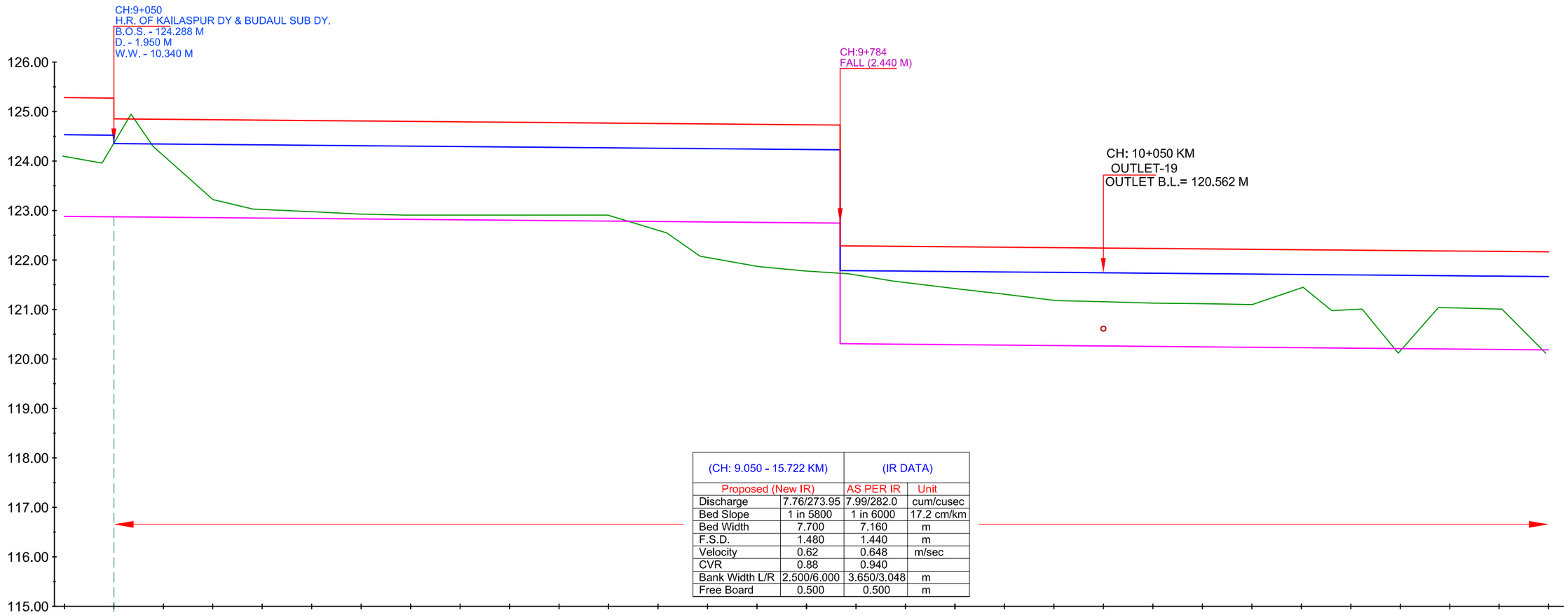
L- SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)
FROM CH 7+500 TO 9+000



(CH: 0.000 - 9.050 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	10.34/365.01	12.15/429.0	cum/cusec
Bed Slope	1 in 6000	1 in 6000	16.7 cm/km
Bed Width	8.700	8.690	m
F.S.D.	1.650	1.650	m
Velocity	0.66	0.717	m/sec
CVR	0.87	0.950	
Bank Width L/R	2.500/6.000	3.650/3.048	m
Free Board	0.750	0.750	m

| | | |

L- SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)
FROM CH 9+000 TO 10+500



(CH: 9.050 - 15.722 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	7.76/273.95	7.99/282.0	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	7.700	7.160	m
F.S.D.	1.480	1.440	m
Velocity	0.62	0.648	m/sec
CVR	0.88	0.940	
Bank Width L/R	2.500/6.000	3.650/3.048	m
Free Board	0.500	0.500	m

		9+000	9+050	9+100	9+150	9+200	9+250	9+300	9+350	9+400	9+450	9+500	9+550	9+600	9+650	9+700	9+750	9+800	9+850	9+900	9+950	10+000	10+050	10+100	10+150	10+200	10+250	10+300	10+350	10+400	10+450	10+500
DESIGN DATA	TOP OF BANK LEVEL	125.283	125.274	124.854	124.846	124.837	124.829	124.820	124.811	124.803	124.794	124.786	124.777	124.768	124.760	124.751	124.742	124.734	124.728	122.288	122.285	122.277	122.268	122.259	122.251	122.242	122.233	122.225	122.216	122.208	122.199	122.190	122.182	122.173	122.164
	F.S.L.	124.533	124.524	124.354	124.346	124.337	124.329	124.320	124.311	124.303	124.294	124.286	124.277	124.268	124.260	124.251	124.242	124.234	124.228	121.788	121.785	121.777	121.768	121.759	121.751	121.742	121.733	121.725	121.716	121.708	121.699	121.690	121.682	121.673	121.664
	Proposed Bed Level	122.883	122.874	122.866	122.857	122.849	122.840	122.831	122.823	122.814	122.806	122.797	122.788	122.780	122.771	122.762	122.754	122.748	120.308	120.305	120.297	120.288	120.279	120.271	120.262	120.253	120.245	120.236	120.228	120.219	120.210	120.202	120.193	120.184	
EXISTING DATA	Bed Level																																		
	TOP OF BANK LEVEL																																		
	NSL	124.100	123.960	124.950	124.300	123.220	123.030	122.980	122.930	122.910	122.910	122.910	122.910	122.910	122.550	122.080	121.870	121.780	121.720	121.580	121.430	121.310	121.180	121.160	121.130	121.120	121.100	121.450	120.980	121.010	120.120	121.040		121.010	120.120
	Chainage IN KM	9+000	9+050	9+100	9+150	9+200	9+250	9+300	9+350	9+400	9+450	9+500	9+550	9+600	9+650	9+700	9+750	9+800	9+850	9+900	9+950	10+000	10+050	10+100	10+150	10+200	10+250	10+300	10+350	10+400	10+450	10+500

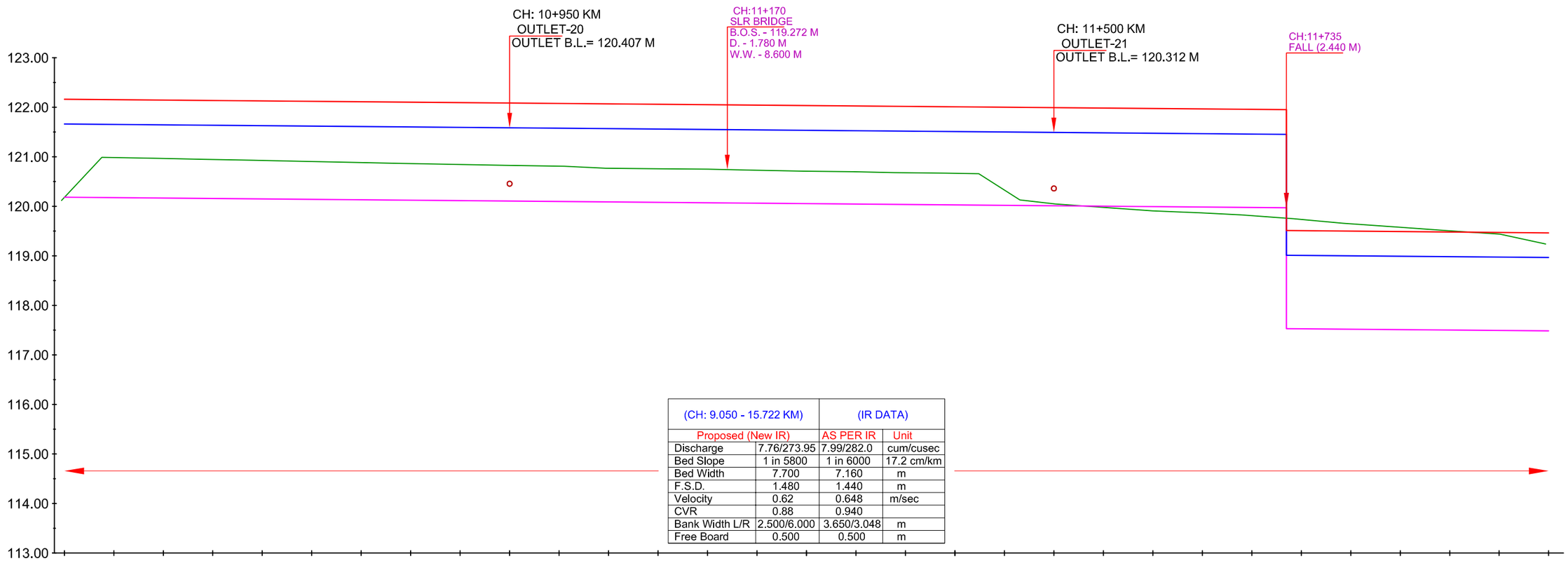
LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF ANGRA BRANCH CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ LSEC- 07 of 25

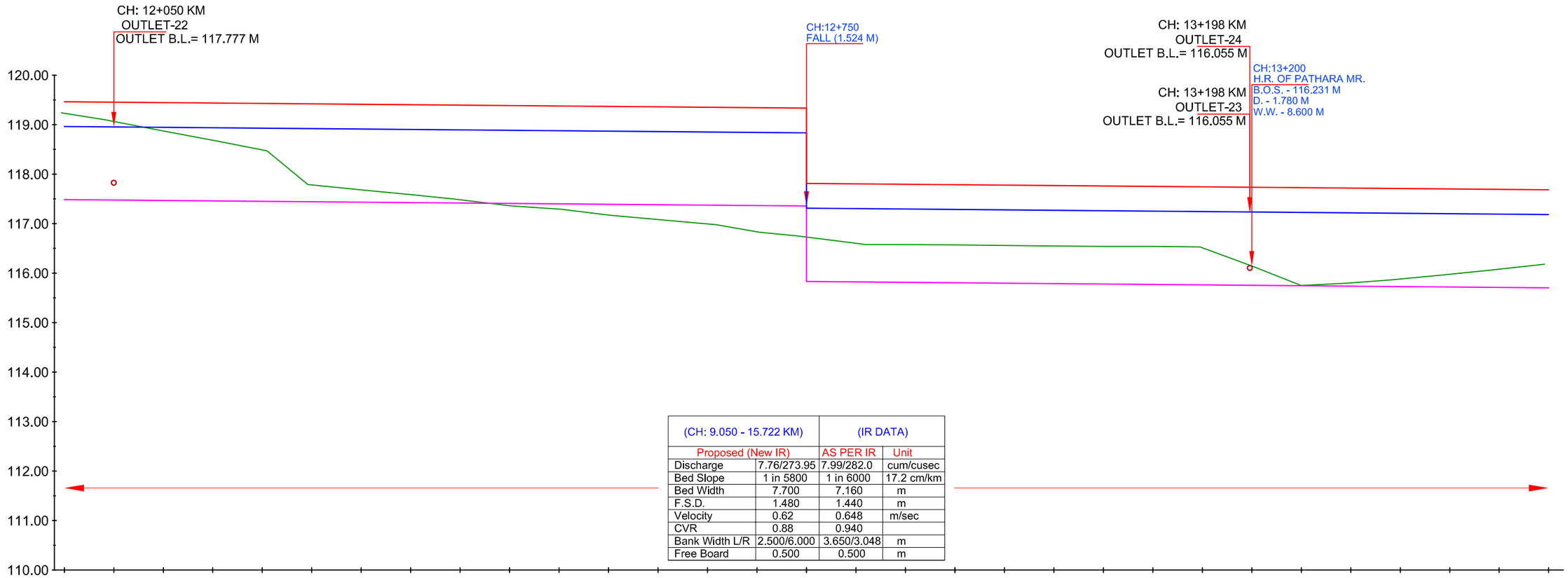
L- SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)
FROM CH 10+500 TO 12+000



(CH: 9.050 - 15.722 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	7.76/273.95	7.99/282.0	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	7.700	7.160	m
F.S.D.	1.480	1.440	m
Velocity	0.62	0.648	m/sec
CVR	0.88	0.940	
Bank Width L/R	2.500/6.000	3.650/3.048	m
Free Board	0.500	0.500	m

| | | |

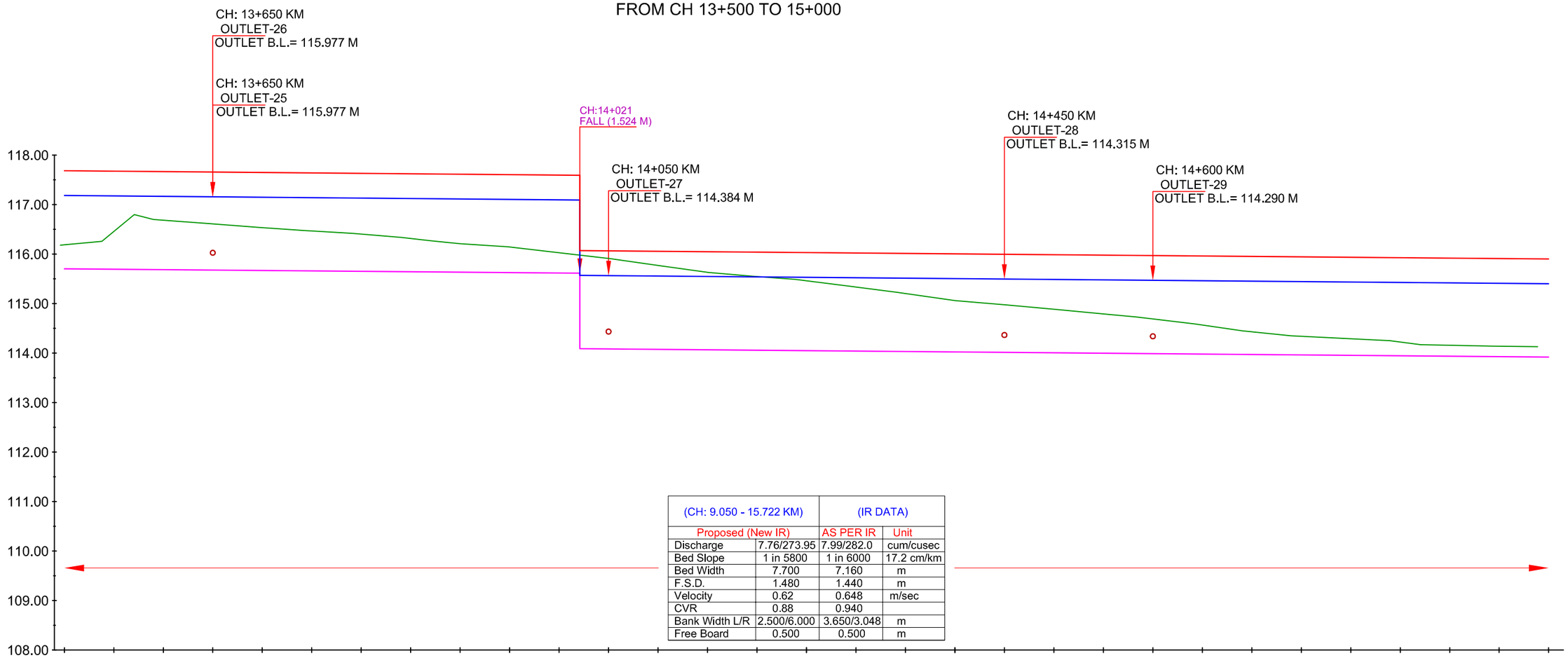
L- SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)
FROM CH 12+000 TO 13+500



(CH: 9.050 - 15.722 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	7.76/273.95	7.99/282.0	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	7.700	7.160	m
F.S.D.	1.480	1.440	m
Velocity	0.62	0.648	m/sec
CVR	0.88	0.940	
Bank Width L/R	2.500/6.000	3.650/3.048	m
Free Board	0.500	0.500	m

| | | |

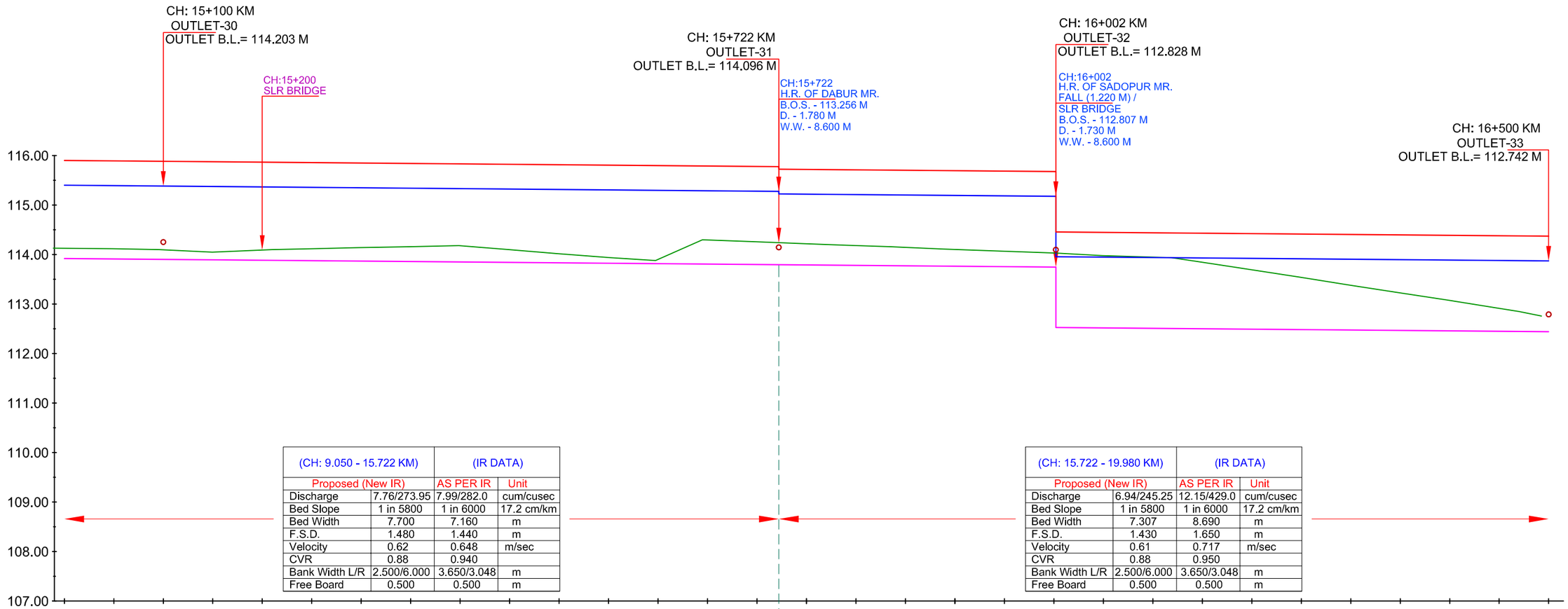
L- SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)
FROM CH 13+500 TO 15+000



(CH: 9.050 - 15.722 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	7.76/273.95	7.99/282.0	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	7.700	7.160	m
F.S.D.	1.480	1.440	m
Velocity	0.62	0.648	m/sec
CVR	0.88	0.940	
Bank Width L/R	2.500/6.000	3.650/3.048	m
Free Board	0.500	0.500	m

| | | |

L- SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)
FROM CH 15+000 TO 16+500

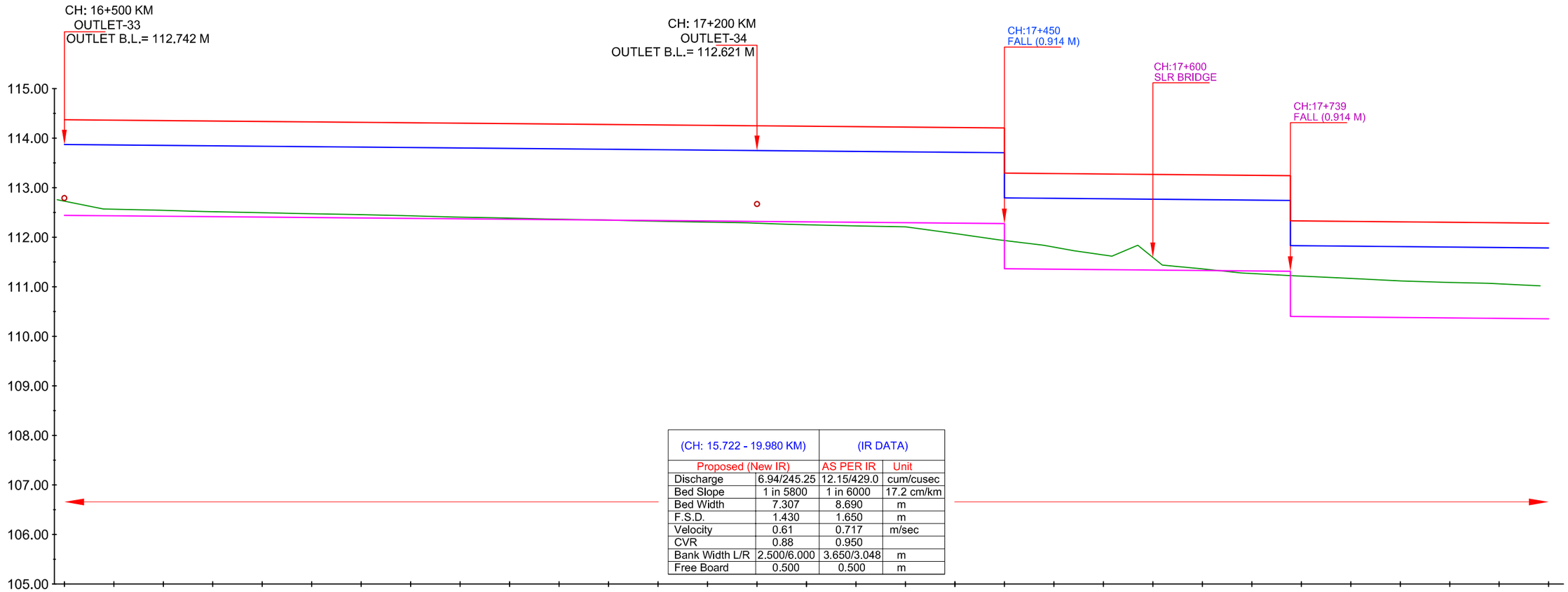


(CH: 9.050 - 15.722 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	7.76/273.95	7.99/282.0	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	7.700	7.160	m
F.S.D.	1.480	1.440	m
Velocity	0.62	0.648	m/sec
CVR	0.88	0.940	
Bank Width L/R	2.500/6.000	3.650/3.048	m
Free Board	0.500	0.500	m

(CH: 15.722 - 19.980 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	6.94/245.25	12.15/429.0	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	7.307	8.690	m
F.S.D.	1.430	1.650	m
Velocity	0.61	0.717	m/sec
CVR	0.88	0.950	
Bank Width L/R	2.500/6.000	3.650/3.048	m
Free Board	0.500	0.500	m

| | | |

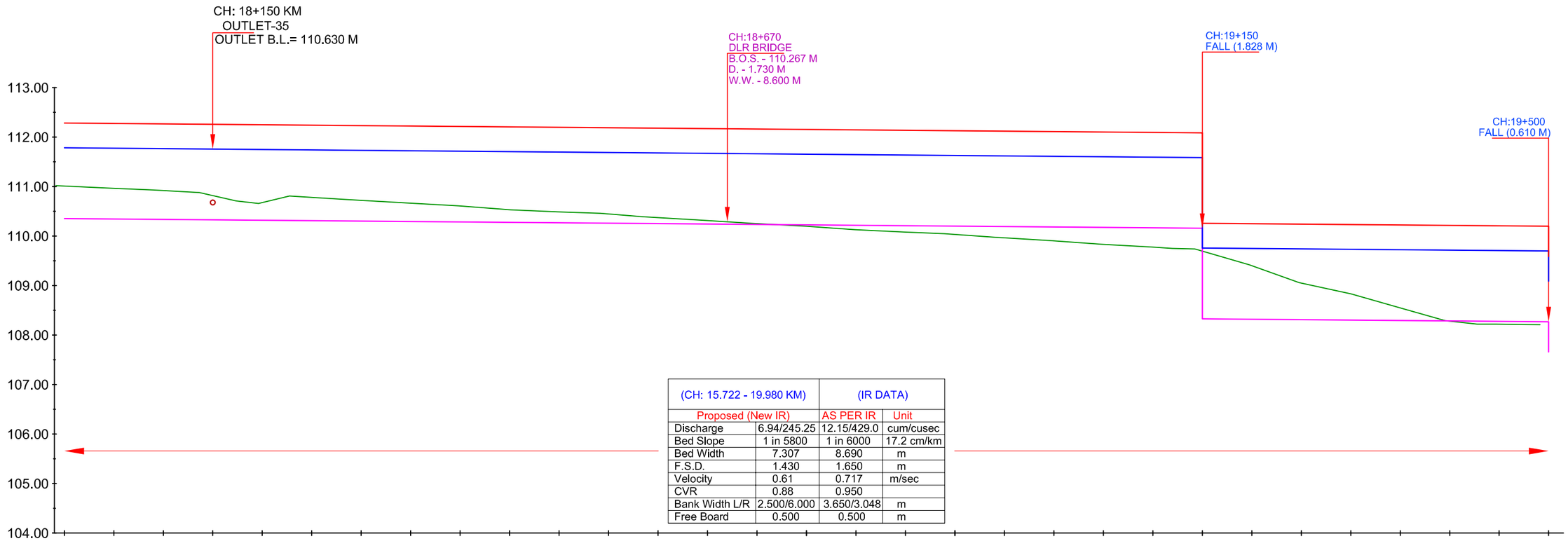
L- SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)
FROM CH 16+500 TO 18+000



(CH: 15.722 - 19.980 KM)	(IR DATA)	
Proposed (New IR)	AS PER IR	Unit
Discharge	6.94/245.25	12.15/429.0	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	7.307	8.690	m
F.S.D.	1.430	1.650	m
Velocity	0.61	0.717	m/sec
CVR	0.88	0.950	
Bank Width L/R	2.500/6.000	3.650/3.048	m
Free Board	0.500	0.500	m

| | | |

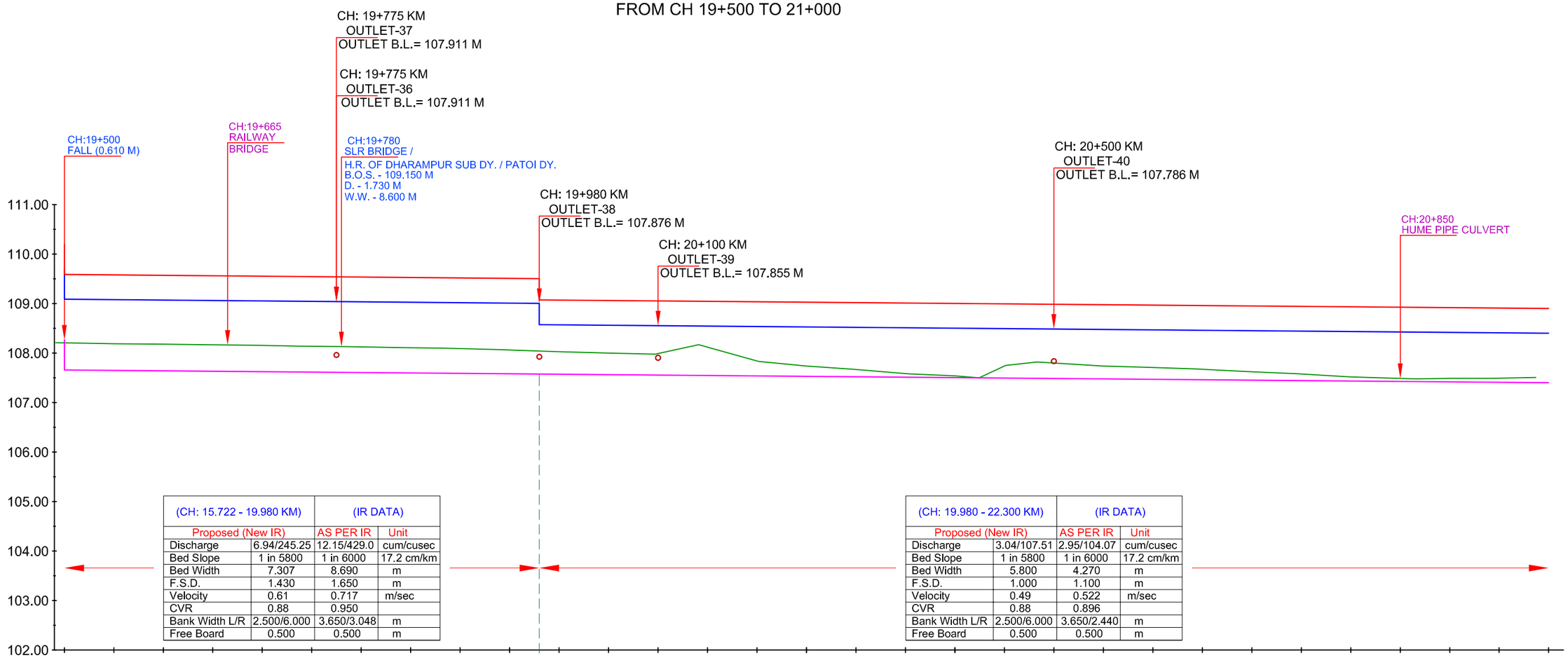
L- SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)
FROM CH 18+000 TO 19+500



(CH: 15.722 - 19.980 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	6.94/245.25	12.15/429.0	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	7.307	8.690	m
F.S.D.	1.430	1.650	m
Velocity	0.61	0.717	m/sec
CVR	0.88	0.950	
Bank Width L/R	2.500/6.000	3.650/3.048	m
Free Board	0.500	0.500	m

| | | |

L- SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)
FROM CH 19+500 TO 21+000



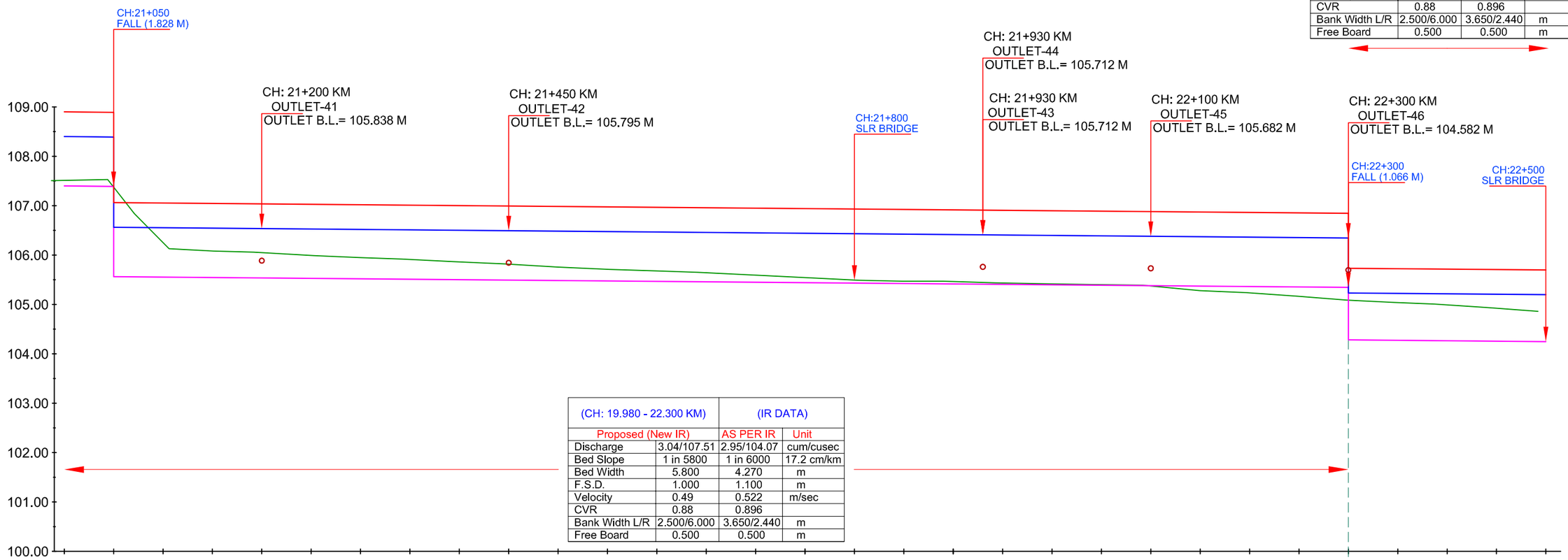
(CH: 15.722 - 19.980 KM)	(IR DATA)	
Proposed (New IR)	AS PER IR	Unit
Discharge	6.94/245.25	12.15/429.0	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	7.307	8.690	m
F.S.D.	1.430	1.650	m
Velocity	0.61	0.717	m/sec
CVR	0.88	0.950	
Bank Width L/R	2.500/6.000	3.650/3.048	m
Free Board	0.500	0.500	m

(CH: 19.980 - 22.300 KM)	(IR DATA)	
Proposed (New IR)	AS PER IR	Unit
Discharge	3.04/107.51	2.95/104.07	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	5.800	4.270	m
F.S.D.	1.000	1.100	m
Velocity	0.49	0.522	m/sec
CVR	0.88	0.896	
Bank Width L/R	2.500/6.000	3.650/2.440	m
Free Board	0.500	0.500	m

| | | |

L- SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)
FROM CH 21+000 TO 22+500

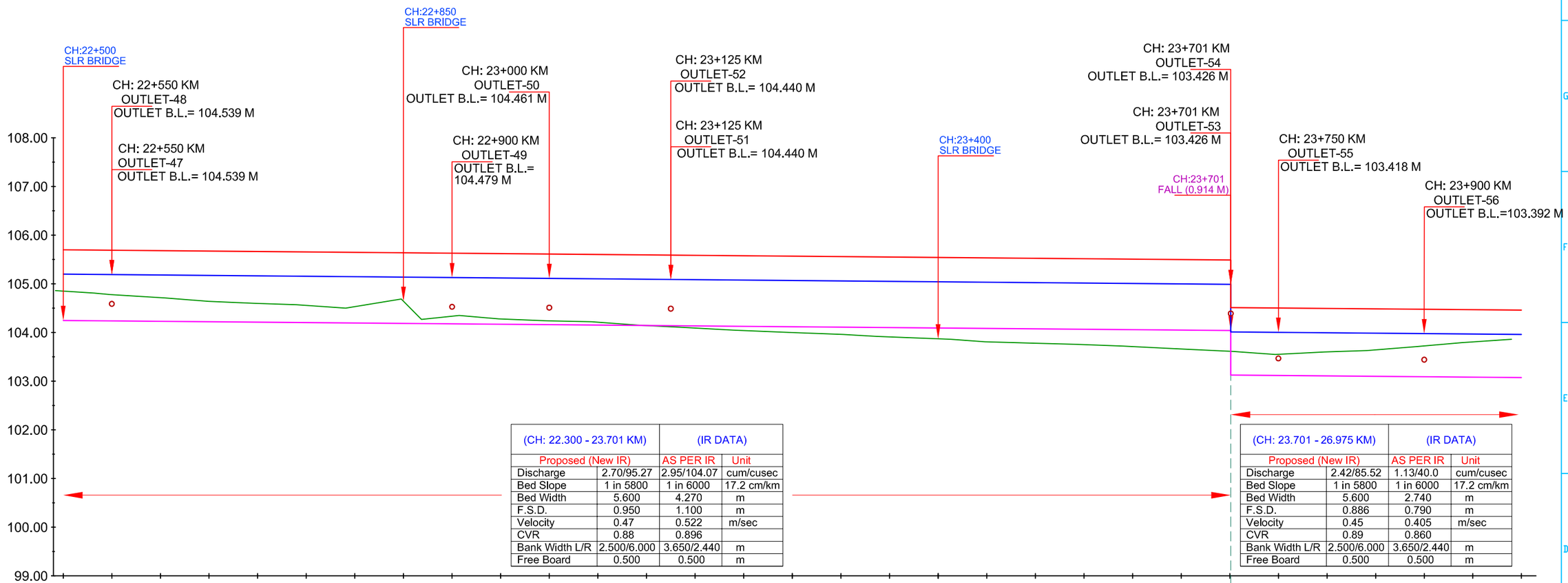
(CH: 22.300 - 23.701 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	2.70/95.27	2.95/104.07	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	5.600	4.270	m
F.S.D.	0.950	1.100	m
Velocity	0.47	0.522	m/sec
CVR	0.88	0.896	
Bank Width L/R	2.500/6.000	3.650/2.440	m
Free Board	0.500	0.500	m



(CH: 19.980 - 22.300 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	3.04/107.51	2.95/104.07	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	5.800	4.270	m
F.S.D.	1.000	1.100	m
Velocity	0.49	0.522	m/sec
CVR	0.88	0.896	
Bank Width L/R	2.500/6.000	3.650/2.440	m
Free Board	0.500	0.500	m

| | | |

L- SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)
FROM CH 22+500 TO 24+000



(CH: 22.300 - 23.701 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	2.70/95.27	2.95/104.07	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	5.600	4.270	m
F.S.D.	0.950	1.100	m
Velocity	0.47	0.522	m/sec
CVR	0.88	0.896	
Bank Width L/R	2.500/6.000	3.650/2.440	m
Free Board	0.500	0.500	m

(CH: 23.701 - 26.975 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	2.42/85.52	1.13/40.0	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	5.600	2.740	m
F.S.D.	0.886	0.790	m
Velocity	0.45	0.405	m/sec
CVR	0.89	0.860	
Bank Width L/R	2.500/6.000	3.650/2.440	m
Free Board	0.500	0.500	m

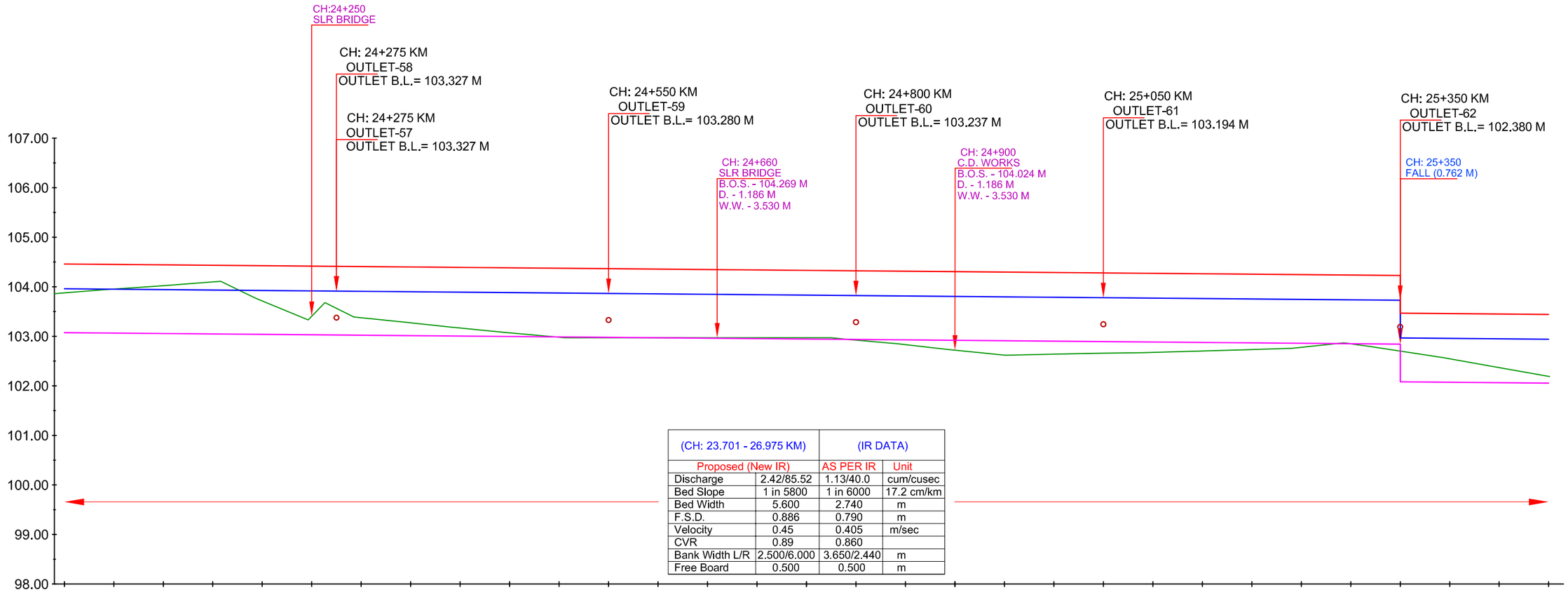
		Chainage IN KM	TOP OF BANK LEVEL	F.S.L.	Proposed Bed Level	Bed Level	TOP OF BANK LEVEL	NSL
DESIGN DATA	EXISTING DATA	22+500	105.698	105.198	104.248			104.860
		22+550	105.689	105.189	104.239			104.810
		22+600	105.680	105.180	104.230			104.780
		22+650	105.672	105.172	104.222			104.710
		22+700	105.663	105.163	104.213			104.640
		22+750	105.654	105.154	104.204			104.600
		22+800	105.646	105.146	104.196			104.570
		22+850	105.637	105.137	104.187			104.500
		22+900	105.629	105.129	104.179			104.690
		22+950	105.620	105.120	104.170			104.270
		23+000	105.611	105.111	104.161			104.350
		23+050	105.603	105.103	104.153			104.280
		23+100	105.594	105.094	104.144			104.240
		23+150	105.585	105.085	104.135			104.220
		23+200	105.577	105.077	104.127			104.150
		23+250	105.568	105.068	104.118			104.100
		23+300	105.560	105.060	104.110			104.050
		23+350	105.551	105.051	104.101			104.000
		23+400	105.542	105.042	104.092			103.960
		23+450	105.534	105.034	104.084			103.920
		23+500	105.525	105.025	104.075			103.860
		23+550	105.516	105.016	104.066			103.810
		23+600	105.508	105.008	104.058			103.780
		23+650	104.999	104.999	104.049			103.760
		23+700	105.491	104.991	104.041			103.720
		23+701	105.490	104.990	104.040			103.670
		23+750	104.504	104.004	103.118			103.610
		23+800	104.495	103.995	103.109			103.550
		23+850	104.487	103.987	103.101			103.600
		23+900	104.478	103.978	103.092			103.630
		23+950	104.470	103.970	103.084			103.710
		24+000	104.461	103.961	103.075			103.790
								103.860

LEGEND			
	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF ANGRA BRANCH CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ LSEC- 16 of 25

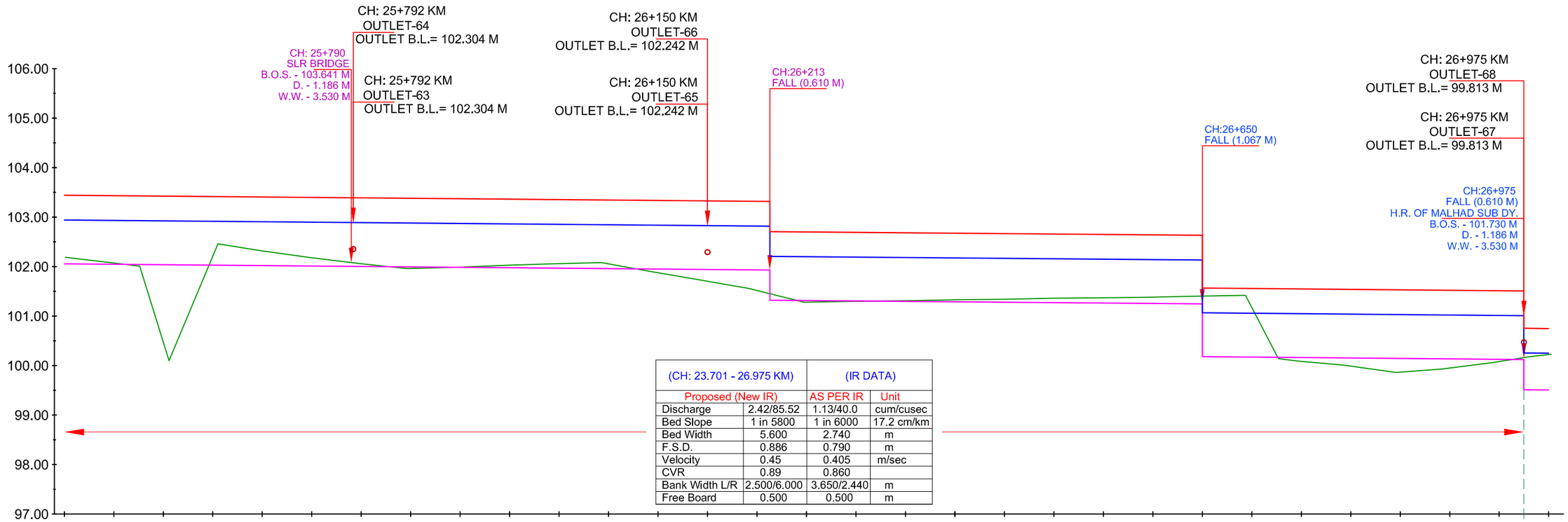
L- SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)
FROM CH 24+000 TO 25+500



(CH: 23.701 - 26.975 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	2.42/85.52	1.13/40.0	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	5.600	2.740	m
F.S.D.	0.886	0.790	m
Velocity	0.45	0.405	m/sec
CVR	0.89	0.860	
Bank Width L/R	2.500/6.000	3.650/2.440	m
Free Board	0.500	0.500	m

| | | |

L- SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)
FROM CH 25+500 TO 27+000



(CH: 23.701 - 26.975 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	2.42/85.52	1.13/40.0	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	5.600	2.740	m
F.S.D.	0.886	0.790	m
Velocity	0.45	0.405	m/sec
CVR	0.89	0.860	
Bank Width L/R	2.500/6.000	3.650/2.440	m
Free Board	0.500	0.500	m

		25+500	25+550	25+600	25+650	25+700	25+750	25+800	25+850	25+900	25+950	26+000	26+050	26+100	26+150	26+200	26+250	26+300	26+350	26+400	26+450	26+500	26+550	26+600	26+650	26+700	26+750	26+800	26+850	26+900	26+950	26+975	27+000
DESIGN DATA	TOP OF BANK LEVEL	103.440	103.432	103.423	103.414	103.406	103.397	103.389	103.380	103.371	103.363	103.354	103.345	103.337	103.328	103.320 103.317 102.707	102.701	102.692	102.684	102.675	102.666	102.658	102.649	102.641	102.632 101.565	101.556	101.548	101.539	101.531	101.522	101.513	101.509 100.753	100.749
	F.S.L.	102.940	102.932	102.923	102.914	102.906	102.897	102.889	102.880	102.871	102.863	102.854	102.845	102.837	102.828	102.820 102.817 102.207	102.201	102.192	102.184	102.175	102.166	102.158	102.149	102.141	102.132 101.065	101.056	101.048	101.039	101.031	101.022	101.013	101.009 100.253	100.249
	Proposed Bed Level	102.054	102.046	102.037	102.028	102.020	102.011	102.003	101.994	101.985	101.977	101.968	101.959	101.951	101.942	101.934 101.931 101.321	101.315	101.306	101.298	101.289	101.280	101.272	101.263	101.255	101.246 100.179	100.170	100.162	100.153	100.145	100.136	100.127	100.123 99.513	99.509
EXISTING DATA	Bed Level																																
	TOP OF BANK LEVEL																																
	NSL	102.190	102.070	102.010	100.100	102.460	102.320	102.180	102.060	101.960	101.990	102.030	102.060	102.080	101.900	101.740	101.560	101.280	101.300	101.310	101.330	101.340	101.350	101.360	101.370	101.380	101.400	101.420	100.140	100.090	100.010	99.860	99.930	100.060	100.180	100.230
	Chainage IN KM																																

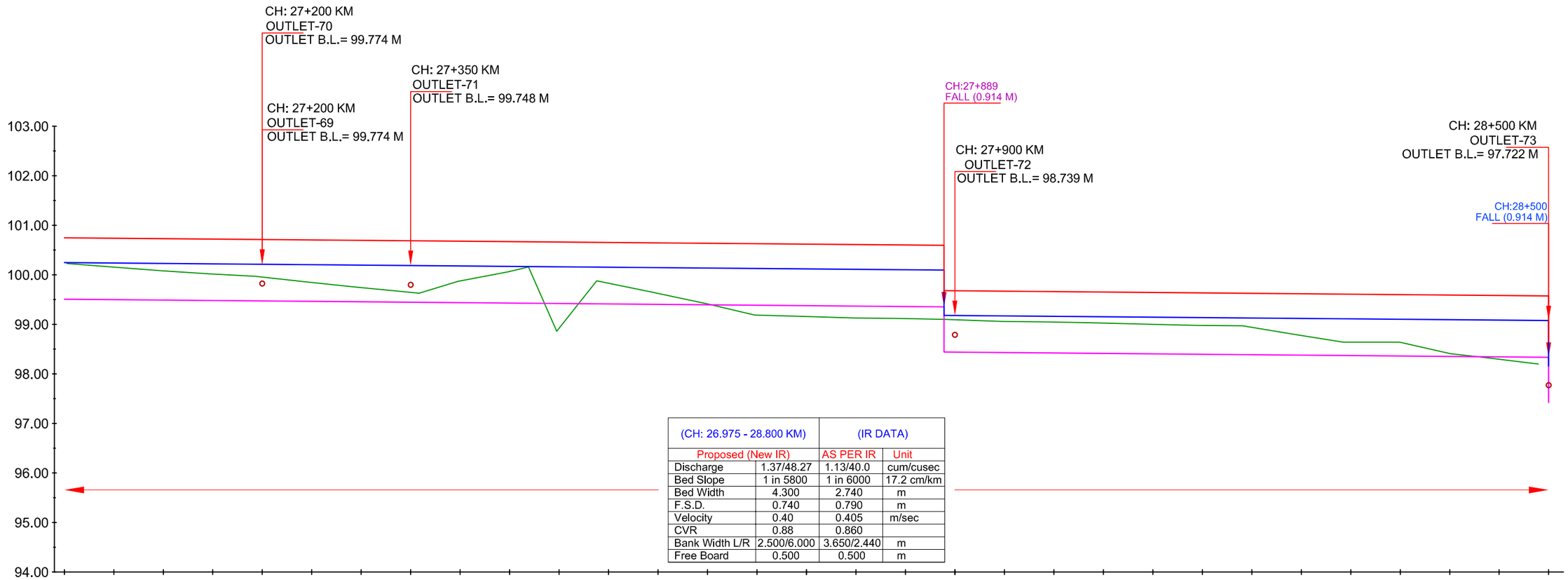
LEGEND

NSL		EXISTING BED LEVEL	
EXISTING TOP OF BANK		PROPOSED BED LEVEL	
EXISTING FALL		PROPOSED FSL	
MODIFIED FALL		PROPOSED TOP OF BANK LEVEL	
NEW FALL			

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF ANGRA BRANCH CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ LSEC- 18 of 25

L- SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)
FROM CH 27+000 TO 28+500



(CH: 26.975 - 28.800 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	1.37/48.27	1.13/40.0	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	4.300	2.740	m
F.S.D.	0.740	0.790	m
Velocity	0.40	0.405	m/sec
CVR	0.88	0.860	
Bank Width L/R	2.500/6.000	3.650/2.440	m
Free Board	0.500	0.500	m

		27+000	27+050	27+100	27+150	27+200	27+250	27+300	27+350	27+400	27+450	27+500	27+550	27+600	27+650	27+700	27+750	27+800	27+850	27+900	27+950	28+000	28+050	28+100	28+150	28+200	28+250	28+300	28+350	28+400	28+450	28+500
DESIGN DATA	TOP OF BANK LEVEL	100.749	100.740	100.731	100.723	100.714	100.706	100.697	100.688	100.680	100.671	100.662	100.654	100.645	100.637	100.628	100.619	100.611	100.602	100.595 99.681 99.679	99.671	99.662	99.654	99.645	99.636	99.628	99.619	99.611	99.602	99.593	99.585	99.576 98.662
	F.S.L.	100.249	100.240	100.231	100.223	100.214	100.206	100.197	100.188	100.180	100.171	100.162	100.154	100.145	100.137	100.128	100.119	100.111	100.102	100.095 99.181 99.179	99.171	99.162	99.154	99.145	99.136	99.128	99.119	99.111	99.102	99.093	99.085	99.076 98.162
	Proposed Bed Level	99.509	99.500	99.491	99.483	99.474	99.466	99.457	99.448	99.440	99.431	99.422	99.414	99.405	99.397	99.388	99.379	99.371	99.362	99.355 98.441 98.439	98.431	98.422	98.414	98.405	98.396	98.388	98.379	98.371	98.362	98.353	98.345	98.336 97.422
EXISTING DATA	Bed Level																															
	TOP OF BANK LEVEL																															
	NSL	100.230	100.160	100.080	100.020	99.970	99.860	99.760	99.630	99.870	100.060	100.160 98.860	99.880	99.650	99.410	99.190	99.160	99.130	99.120	99.100	99.060	99.050	99.030	99.000	98.980	98.970	98.800	98.640	98.640	98.410	98.320	98.200
	Chainage IN KM	27+000	27+050	27+100	27+150	27+200	27+250	27+300	27+350	27+400	27+450	27+500	27+550	27+600	27+650	27+700	27+750	27+800	27+850	27+900	27+950	28+000	28+050	28+100	28+150	28+200	28+250	28+300	28+350	28+400	28+450	28+500

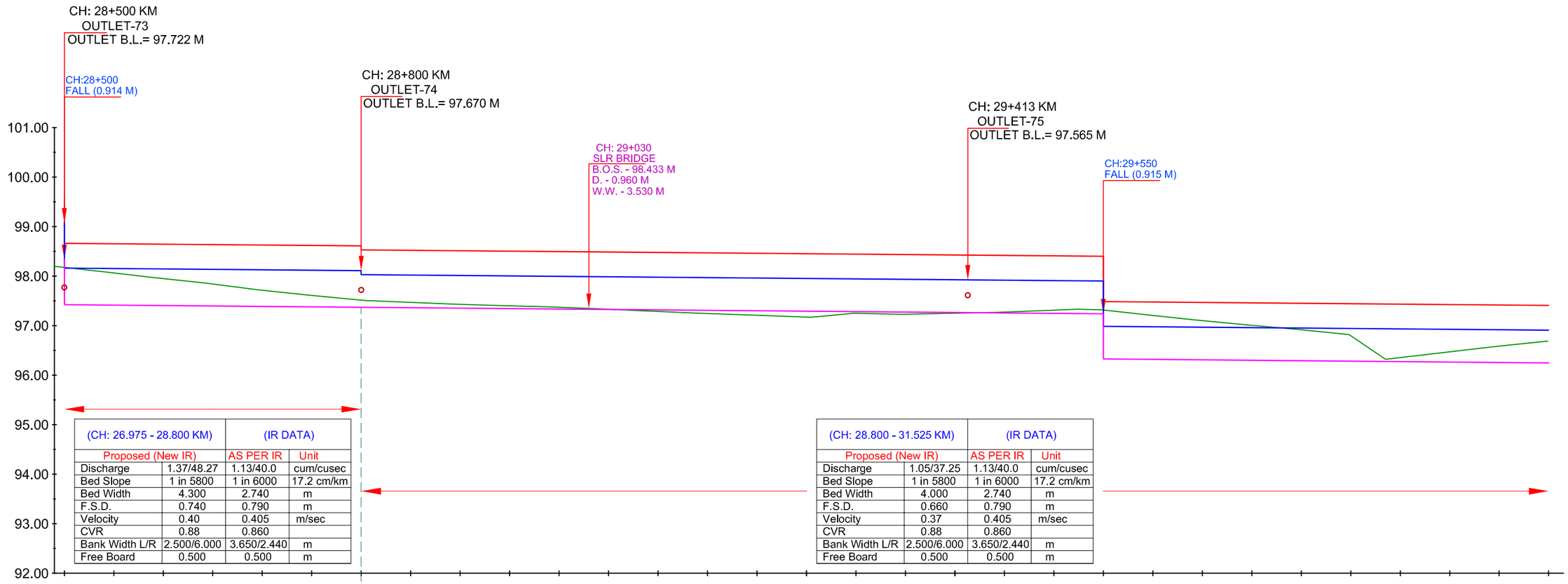
LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF ANGRA BRANCH CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ LSEC- 19 of 25

L- SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)
FROM CH 28+500 TO 30+000



(CH: 26.975 - 28.800 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	1.37/48.27	1.13/40.0	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	4.300	2.740	m
F.S.D.	0.740	0.790	m
Velocity	0.40	0.405	m/sec
CVR	0.88	0.860	
Bank Width L/R	2.500/6.000	3.650/2.440	m
Free Board	0.500	0.500	m

(CH: 28.800 - 31.525 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	1.05/37.25	1.13/40.0	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	4.000	2.740	m
F.S.D.	0.660	0.790	m
Velocity	0.37	0.405	m/sec
CVR	0.88	0.860	
Bank Width L/R	2.500/6.000	3.650/2.440	m
Free Board	0.500	0.500	m

DESIGN DATA	TOP OF BANK LEVEL	99.576 98.662	98.653	98.645	98.636	98.628	98.619	98.610 98.530	98.522	98.513	98.504	98.496	98.487	98.479	98.470	98.461	98.453	98.444	98.435	98.427	98.418	98.410	98.401 97.486	97.477	97.469	97.460	97.452	97.443	97.434	97.426	97.417	97.408
	F.S.L.	99.076 98.162	98.153	98.145	98.136	98.128	98.119	98.110 98.030	98.022	98.013	98.004	97.996	97.987	97.979	97.970	97.961	97.953	97.944	97.935	97.927	97.918	97.910	97.901 96.986	96.977	96.969	96.960	96.952	96.943	96.934	96.926	96.917	96.908
	Proposed Bed Level	98.336 97.422	97.413	97.405	97.396	97.388	97.379	97.370	97.362	97.353	97.344	97.336	97.327	97.319	97.310	97.301	97.293	97.284	97.275	97.267	97.258	97.250	97.241 96.326	96.317	96.309	96.300	96.292	96.283	96.274	96.266	96.257	96.248
EXISTING DATA	Bed Level																															
	TOP OF BANK LEVEL																															
	NSL	98.290	98.080	97.970	97.860	97.730	97.620	97.510	97.470	97.430	97.400	97.380	97.340	97.300	97.250	97.210	97.170	97.250	97.230	97.250	97.270	97.310	97.330	97.320	97.220	97.120	97.010	96.920	96.820	96.320	96.450	96.580	96.690
	Chainage IN KM	28+500	28+550	28+600	28+650	28+700	28+750	28+800	28+850	28+900	28+950	29+000	29+050	29+100	29+150	29+200	29+250	29+300	29+350	29+400	29+450	29+500	29+550	29+600	29+650	29+700	29+750	29+800	29+850	29+900	29+950	30+000

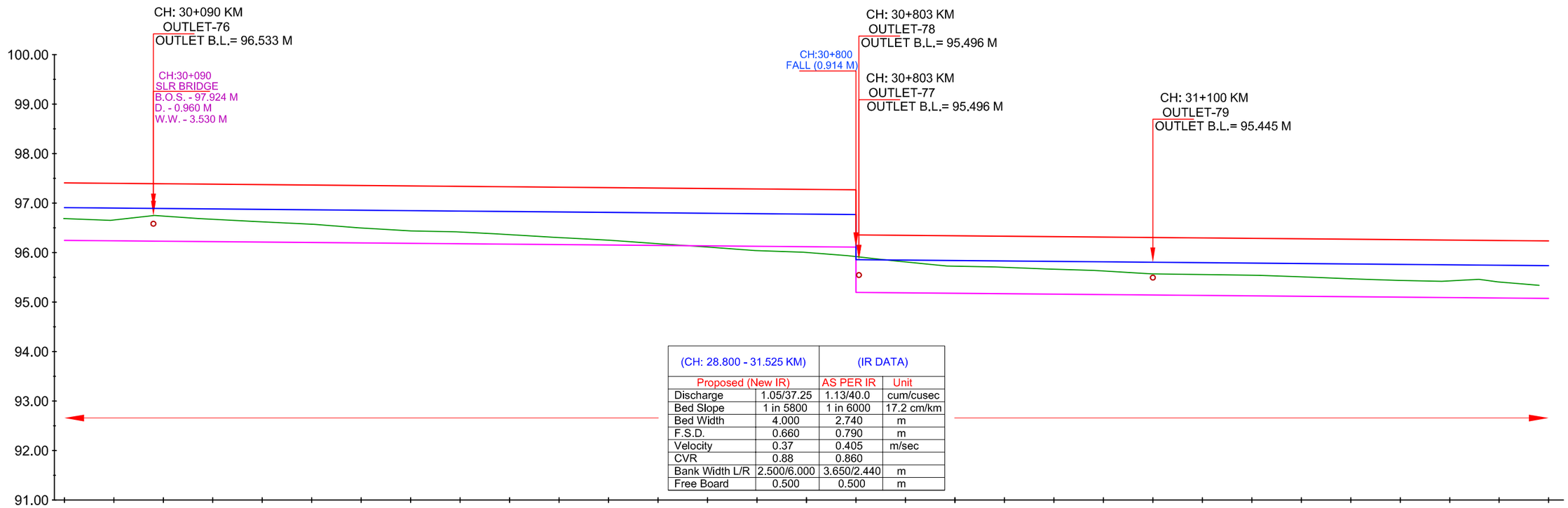
LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF ANGRA BRANCH CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ LSEC- 20 of 25

L- SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)
FROM CH 30+000 TO 31+500



(CH: 28.800 - 31.525 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	1.05/37.25	1.13/40.0	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	4.000	2.740	m
F.S.D.	0.660	0.790	m
Velocity	0.37	0.405	m/sec
CVR	0.88	0.860	
Bank Width L/R	2.500/6.000	3.650/2.440	m
Free Board	0.500	0.500	m

		30+000	30+050	30+100	30+150	30+200	30+250	30+300	30+350	30+400	30+450	30+500	30+550	30+600	30+650	30+700	30+750	30+800	30+850	30+900	30+950	31+000	31+050	31+100	31+150	31+200	31+250	31+300	31+350	31+400	31+450	31+500
DESIGN DATA	TOP OF BANK LEVEL	97.408	97.400	97.391	97.383	97.374	97.365	97.357	97.348	97.339	97.331	97.322	97.314	97.305	97.296	97.288	97.279	97.270 96.356	96.348	96.339	96.331	96.322	96.313	96.305	96.296	96.288	96.279	96.270	96.262	96.253	96.244	96.236
	F.S.L.	96.908	96.900	96.891	96.883	96.874	96.865	96.857	96.848	96.839	96.831	96.822	96.814	96.805	96.796	96.788	96.779	96.770 95.856	95.848	95.839	95.831	95.822	95.813	95.805	95.796	95.788	95.779	95.770	95.762	95.753	95.744	95.736
	Proposed Bed Level	96.248	96.240	96.231	96.223	96.214	96.205	96.197	96.188	96.179	96.171	96.162	96.154	96.145	96.136	96.128	96.119	96.110 95.196	95.188	95.179	95.171	95.162	95.153	95.145	95.136	95.128	95.119	95.110	95.102	95.093	95.084	95.076
EXISTING DATA	Bed Level																															
	TOP OF BANK LEVEL																															
	NSL	96.690	96.650	96.750	96.690	96.630	96.570	96.500	96.440	96.420	96.380	96.310	96.250	96.180	96.110	96.040	96.010	95.940	95.840	95.730	95.710	95.670	95.640	95.570		95.540	95.510	95.470	95.440	95.420	95.460 95.410	95.340
	Chainage IN KM																															

LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF ANGRA BRANCH CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ LSEC- 21 of 25

L- SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)
FROM CH 31+500 TO 33+000

(CH: 31.525 - 31.530 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.78/27.70	1.13/40.0	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	3.600	2.740	m
F.S.D.	0.590	0.790	m
Velocity	0.34	0.405	m/sec
CVR	0.88	0.860	
Bank Width L/R	2.500/6.000	3.650/2.440	m
Free Board	0.500	0.500	m

CH: 31+525 KM
OUTLET-80
OUTLET B.L.= 95.371 M

CH: 31+525 KM
OUTLET-81
OUTLET B.L.= 95.371 M

CH:31+530
H.R. OF RAMPUR-2 MR.
B.O.S. - 96.801 M
D. - 0.890 M
W.W. - 3.530 M

CH:31+852
FALL (0.914 M)

CH: 31+925 KM
OUTLET-83
OUTLET B.L.= 94.238 M

CH: 31+925 KM
OUTLET-82
OUTLET B.L.= 94.238 M

CH:32+690
SLR BRIDGE
B.O.S. - 96.050 M
D. - 0.690 M
W.W. - 3.530 M

CH: 33+000 KM
OUTLET-84
OUTLET B.L.= 94.053 M

98.00
97.00
96.00
95.00
94.00
93.00
92.00
91.00
90.00
89.00

(CH: 31.530 - 31.925 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.38/13.27	1.13/40.0	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	2.900	2.740	m
F.S.D.	0.430	0.790	m
Velocity	0.28	0.405	m/sec
CVR	0.88	0.860	
Bank Width L/R	2.500/6.000	3.650/2.440	m
Free Board	0.500	0.500	m

(CH: 31.925 - 33.500 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.30/10.44	1.13/40.0	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	2.700	2.740	m
F.S.D.	0.390	0.790	m
Velocity	0.26	0.405	m/sec
CVR	0.88	0.860	
Bank Width L/R	2.500/6.000	3.650/2.440	m
Free Board	0.500	0.500	m

		Chainage IN KM	TOP OF BANK LEVEL	F.S.L.	Proposed Bed Level	Bed Level	TOP OF BANK LEVEL	NSL
DESIGN DATA	EXISTING DATA	31+500	96.236	95.736	95.076			95.340
		31+525	96.231	95.731	95.071			
		31+530	96.161	95.661	95.071			
		31+550	96.001	95.501	95.067			95.290
		31+600	95.989	95.489	95.059			95.240
		31+650	95.980	95.480	95.050			95.190
		31+700	95.971	95.471	95.041			95.140
		31+750	95.963	95.463	95.033			95.090
		31+800	95.954	95.454	95.024			95.030
		31+850	95.945	95.445	95.015			94.990
		31+900	95.022	94.522	94.092			94.960
		31+925	95.018	94.518	94.088			
		31+950	94.978	94.478	94.084			94.900
		32+000	94.974	94.474	94.084			94.830
		32+050	94.965	94.465	94.075			94.760
		32+100	94.957	94.457	94.067			94.690
		32+150	94.948	94.448	94.058			94.630
		32+200	94.939	94.439	94.049			94.560
		32+250	94.931	94.431	94.041			94.520
		32+300	94.922	94.422	94.032			94.490
		32+350	94.913	94.413	94.023			94.430
		32+400	94.905	94.405	94.015			94.280
		32+450	94.896	94.396	94.006			94.120
		32+500	94.888	94.388	93.998			94.420
		32+550	94.879	94.379	93.989			94.340
		32+600	94.870	94.370	93.980			94.300
		32+650	94.862	94.362	93.972			94.290
		32+700	94.853	94.353	93.963			94.240
		32+750	94.844	94.344	93.954			94.190
		32+800	94.836	94.336	93.946			94.150
		32+850	94.827	94.327	93.937			94.110
		32+900	94.819	94.319	93.929			94.060
		32+950	94.810	94.310	93.920			94.020
		33+000	94.801	94.301	93.911			93.970
			94.793	94.293	93.903			94.060

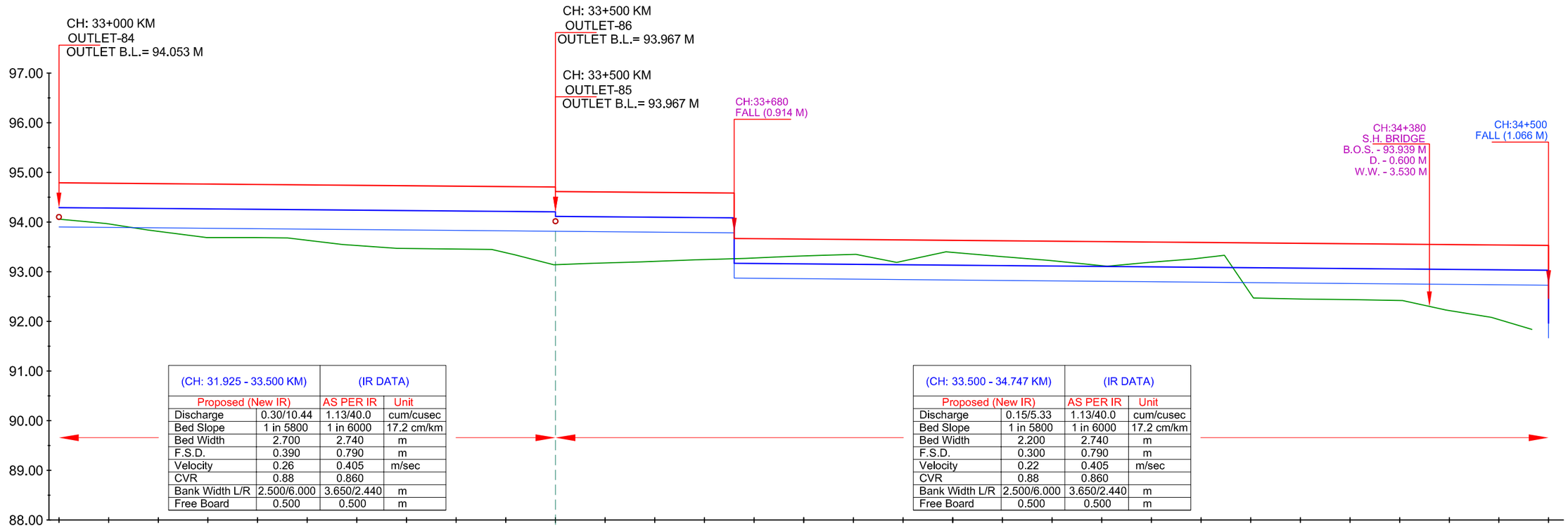
LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF ANGRA BRANCH CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ LSEC- 22 of 25

L- SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)
FROM CH 33+000 TO 34+500



(CH: 31.925 - 33.500 KM)	Proposed (New IR)	(IR DATA) AS PER IR	Unit
Discharge	0.30/10.44	1.13/40.0	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	2.700	2.740	m
F.S.D.	0.390	0.790	m
Velocity	0.26	0.405	m/sec
CVR	0.88	0.860	
Bank Width L/R	2.500/6.000	3.650/2.440	m
Free Board	0.500	0.500	m

(CH: 33.500 - 34.747 KM)	Proposed (New IR)	(IR DATA) AS PER IR	Unit
Discharge	0.15/5.33	1.13/40.0	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	2.200	2.740	m
F.S.D.	0.300	0.790	m
Velocity	0.22	0.405	m/sec
CVR	0.88	0.860	
Bank Width L/R	2.500/6.000	3.650/2.440	m
Free Board	0.500	0.500	m

		Chainage IN KM	33+000	33+050	33+100	33+150	33+200	33+250	33+300	33+350	33+400	33+450	33+500	33+550	33+600	33+650	33+700	33+750	33+800	33+850	33+900	33+950	34+000	34+050	34+100	34+150	34+200	34+250	34+300	34+350	34+400	34+450	34+500
DESIGN DATA	TOP OF BANK LEVEL		94.793	94.784	94.776	94.767	94.758	94.750	94.741	94.732	94.724	94.715	94.707 94.617	94.608	94.599	94.591	94.586 93.672 93.668	93.659	93.651	93.642	93.634	93.625	93.616	93.608	93.599	93.590	93.582	93.573	93.565	93.556	93.547	93.539	93.530 92.464
	F.S.L.		94.293	94.284	94.276	94.267	94.258	94.250	94.241	94.232	94.224	94.215	94.207 94.117	94.108	94.099	94.091	94.086 93.672 93.168	93.159	93.151	93.142	93.134	93.125	93.116	93.108	93.099	93.090	93.082	93.073	93.065	93.056	93.047	93.039	93.030 91.964
	Proposed Bed Level		93.903	93.894	93.886	93.877	93.868	93.860	93.851	93.842	93.834	93.825	93.817	93.808	93.799	93.791	93.786 92.872 92.868	92.859	92.851	92.842	92.834	92.825	92.816	92.808	92.799	92.790	92.782	92.773	92.765	92.756	92.747	92.739	92.730 91.664
EXISTING DATA	Bed Level																																
	TOP OF BANK LEVEL																																
	NSL		94.060	93.970	93.840	93.690	93.690	93.680	93.550	93.470	93.460	93.450	93.340	93.140	93.170	93.200	93.240	93.270	93.310	93.330	93.350	93.190	93.400	93.310	93.230	93.110	93.190	93.260	93.330	92.470	92.450	92.440	92.420	92.230	92.080	91.840

LEGEND

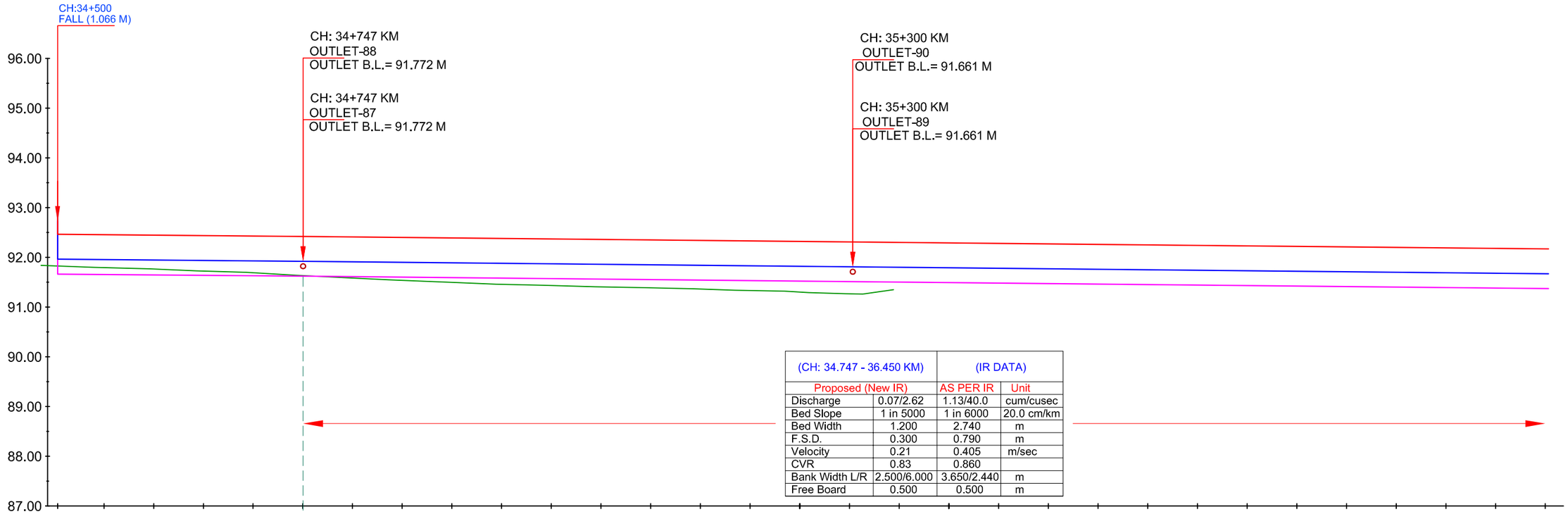
	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF ANGRA BRANCH CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ LSEC- 23 of 25

L- SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)
FROM CH 34+500 TO 36+000

(CH: 33.500 - 34.747 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.15/5.33	1.13/40.0	cum/cusec
Bed Slope	1 in 5800	1 in 6000	17.2 cm/km
Bed Width	2.200	2.740	m
F.S.D.	0.300	0.790	m
Velocity	0.22	0.405	m/sec
CVR	0.88	0.860	
Bank Width L/R	2.500/6.000	3.650/2.440	m
Free Board	0.500	0.500	m



(CH: 34.747 - 36.450 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.07/2.62	1.13/40.0	cum/cusec
Bed Slope	1 in 5000	1 in 6000	20.0 cm/km
Bed Width	1.200	2.740	m
F.S.D.	0.300	0.790	m
Velocity	0.21	0.405	m/sec
CVR	0.83	0.860	
Bank Width L/R	2.500/6.000	3.650/2.440	m
Free Board	0.500	0.500	m

		34+500	34+550	34+600	34+650	34+700	34+747	34+750	34+800	34+850	34+900	34+950	35+000	35+050	35+100	35+150	35+200	35+250	35+300	35+350	35+400	35+450	35+500	35+550	35+600	35+650	35+700	35+750	35+800	35+850	35+900	35+950	36+000
DESIGN DATA	TOP OF BANK LEVEL	93.530 92.464	92.456	92.447	92.438	92.430	92.422 92.421		92.411	92.401	92.391	92.381	92.371	92.361	92.351	92.341	92.331	92.321	92.311	92.301	92.291	92.281	92.271	92.261	92.251	92.241	92.231	92.221	92.211	92.201	92.191	92.181	92.171
	F.S.L.	93.030 91.964	91.956	91.947	91.938	91.930	91.922 91.921		91.911	91.901	91.891	91.881	91.871	91.861	91.851	91.841	91.831	91.821	91.811	91.801	91.791	91.781	91.771	91.761	91.751	91.741	91.731	91.721	91.711	91.701	91.691	91.681	91.671
	Proposed Bed Level	92.730 91.664	91.656	91.647	91.638	91.630	91.622 91.621		91.611	91.601	91.591	91.581	91.571	91.561	91.551	91.541	91.531	91.521	91.511	91.501	91.491	91.481	91.471	91.461	91.451	91.441	91.431	91.421	91.411	91.401	91.391	91.381	91.371
EXISTING DATA	Bed Level																																
	TOP OF BANK LEVEL																																
	NSL	91.840	91.800	91.770	91.730	91.700	91.640		91.590	91.550	91.500	91.460	91.440	91.410	91.390	91.370	91.340	91.320	91.290	91.270 91.260	91.350													
	Chainage IN KM																																

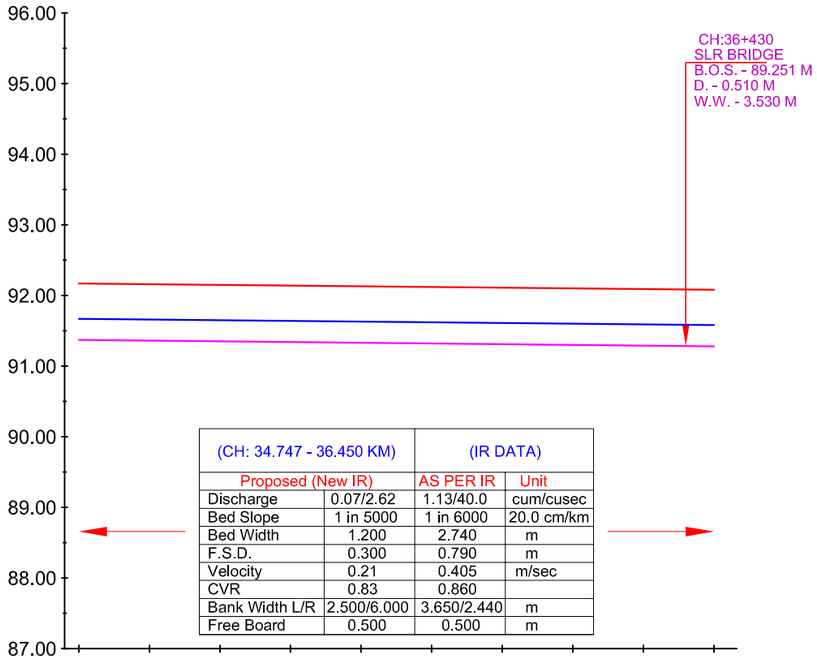
LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF ANGRA BRANCH CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ LSEC- 24 of 25

L- SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)
FROM CH 36+000 TO 36+450



(CH: 34.747 - 36.450 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.07/2.62	1.13/40.0	cum/cusec
Bed Slope	1 in 5000	1 in 6000	20.0 cm/km
Bed Width	1.200	2.740	m
F.S.D.	0.300	0.790	m
Velocity	0.21	0.405	m/sec
CVR	0.83	0.860	
Bank Width L/R	2.500/6.000	3.650/2.440	m
Free Board	0.500	0.500	m

DESIGN DATA	TOP OF BANK LEVEL	92.171	92.161	92.151	92.141	92.131	92.121	92.111	92.101	92.091	92.081
	F.S.L.	91.671	91.661	91.651	91.641	91.631	91.621	91.611	91.601	91.591	91.581
	Proposed Bed Level	91.371	91.361	91.351	91.341	91.331	91.321	91.311	91.301	91.291	91.281
EXISTING DATA	Bed Level										
	TOP OF BANK LEVEL										
	NSL										
	Chainage IN KM	36+000	36+050	36+100	36+150	36+200	36+250	36+300	36+350	36+400	36+450

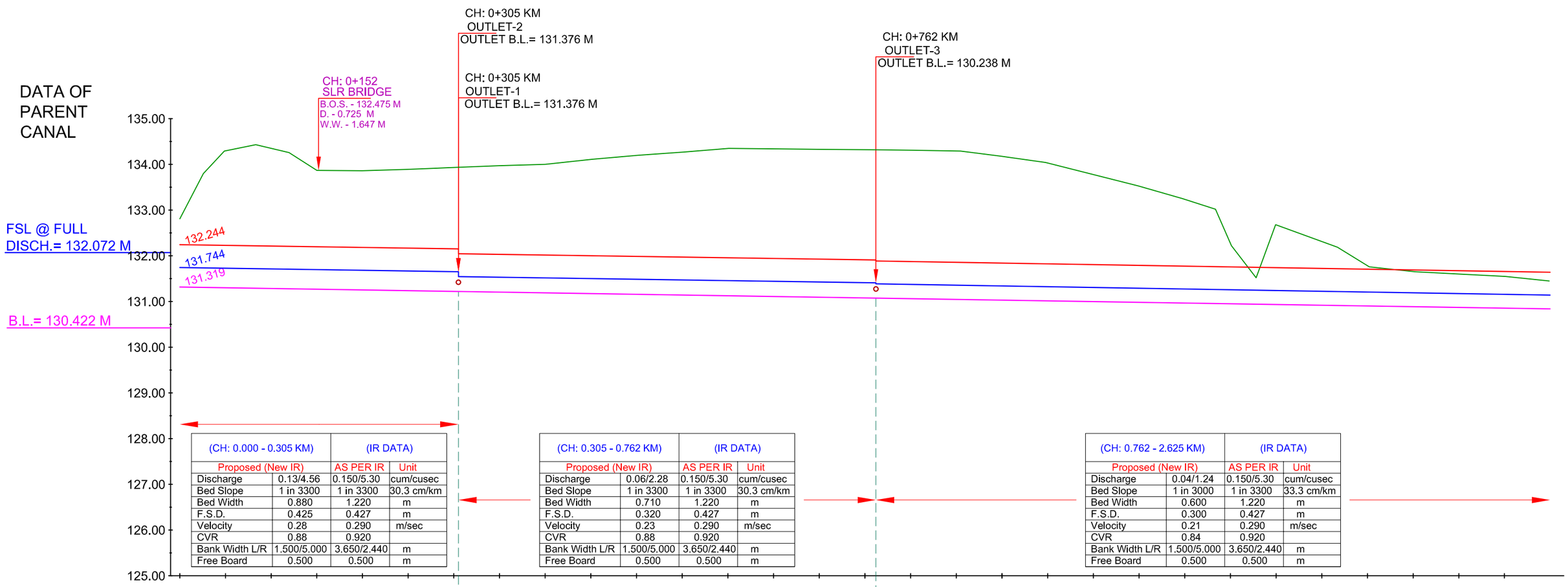
LEGEND

NSL		EXISTING BED LEVEL	
EXISTING TOP OF BANK		PROPOSED BED LEVEL	
EXISTING FALL		PROPOSED FSL	
MODIFIED FALL		PROPOSED TOP OF BANK LEVEL	
NEW FALL			

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF ANGRA BRANCH CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ LSEC- 25 of 25

L- SECTION OF PALUA MR.
(OFFTAKE FROM RD - 0+350 KM., ANGRA BRANCH CANAL)
FROM CH 0+000 TO 1+500



(CH: 0.000 - 0.305 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.13/4.56	0.150/5.30	cum/cusec
Bed Slope	1 in 3300	1 in 3300	30.3 cm/km
Bed Width	0.880	1.220	m
F.S.D.	0.425	0.427	m
Velocity	0.28	0.290	m/sec
CVR	0.88	0.920	
Bank Width L/R	1.500/5.000	3.650/2.440	m
Free Board	0.500	0.500	m

(CH: 0.305 - 0.762 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.06/2.28	0.150/5.30	cum/cusec
Bed Slope	1 in 3300	1 in 3300	30.3 cm/km
Bed Width	0.710	1.220	m
F.S.D.	0.320	0.427	m
Velocity	0.23	0.290	m/sec
CVR	0.88	0.920	
Bank Width L/R	1.500/5.000	3.650/2.440	m
Free Board	0.500	0.500	m

(CH: 0.762 - 2.625 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.04/1.24	0.150/5.30	cum/cusec
Bed Slope	1 in 3000	1 in 3300	33.3 cm/km
Bed Width	0.600	1.220	m
F.S.D.	0.300	0.427	m
Velocity	0.21	0.290	m/sec
CVR	0.84	0.920	
Bank Width L/R	1.500/5.000	3.650/2.440	m
Free Board	0.500	0.500	m

		Chainage IN KM	TOP OF BANK LEVEL	F.S.L.	Proposed Bed Level	Bed Level	TOP OF BANK LEVEL	NSL
DESIGN DATA	EXISTING DATA	0+000	132.244	131.744	131.319			132.810
		0+050	132.229	131.729	131.304			133.800
		0+100	132.213	131.713	131.288			134.290
		0+150	132.198	131.698	131.273			134.430
		0+200	132.183	131.683	131.258			134.260
		0+250	132.168	131.668	131.243			133.870
		0+300	132.153	131.653	131.228			133.860
		0+305	132.151	131.651	131.226			133.890
		0+350	132.046	131.546	131.213			133.910
		0+400	132.033	131.533	131.197			133.930
		0+450	132.017	131.517	131.182			133.970
		0+500	132.002	131.502	131.167			134.000
		0+550	131.987	131.487	131.152			134.110
		0+600	131.972	131.472	131.137			134.200
		0+650	131.957	131.457	131.122			134.270
		0+700	131.942	131.442	131.107			134.350
		0+750	131.927	131.427	131.091			134.340
		0+762	131.911	131.411	131.088			134.330
		0+800	131.908	131.408	131.075			134.320
		0+850	131.888	131.388	131.058			134.310
		0+900	131.875	131.375	131.042			134.290
		0+950	131.858	131.358	131.025			134.180
		1+000	131.842	131.342	131.008			134.040
		1+050	131.825	131.325	130.992			133.790
		1+100	131.808	131.308	130.975			133.530
		1+150	131.792	131.292	130.958			133.250
		1+200	131.775	131.275	130.942			133.020
		1+250	131.758	131.258	130.925			132.220
		1+300	131.742	131.242	130.908			131.520
		1+350	131.725	131.225	130.892			132.680
		1+400	131.708	131.208	130.875			132.190
		1+450	131.692	131.192	130.858			131.760
		1+500	131.675	131.175	130.842			131.650
			131.658	131.158				131.600
			131.642	131.142				131.550
								131.450

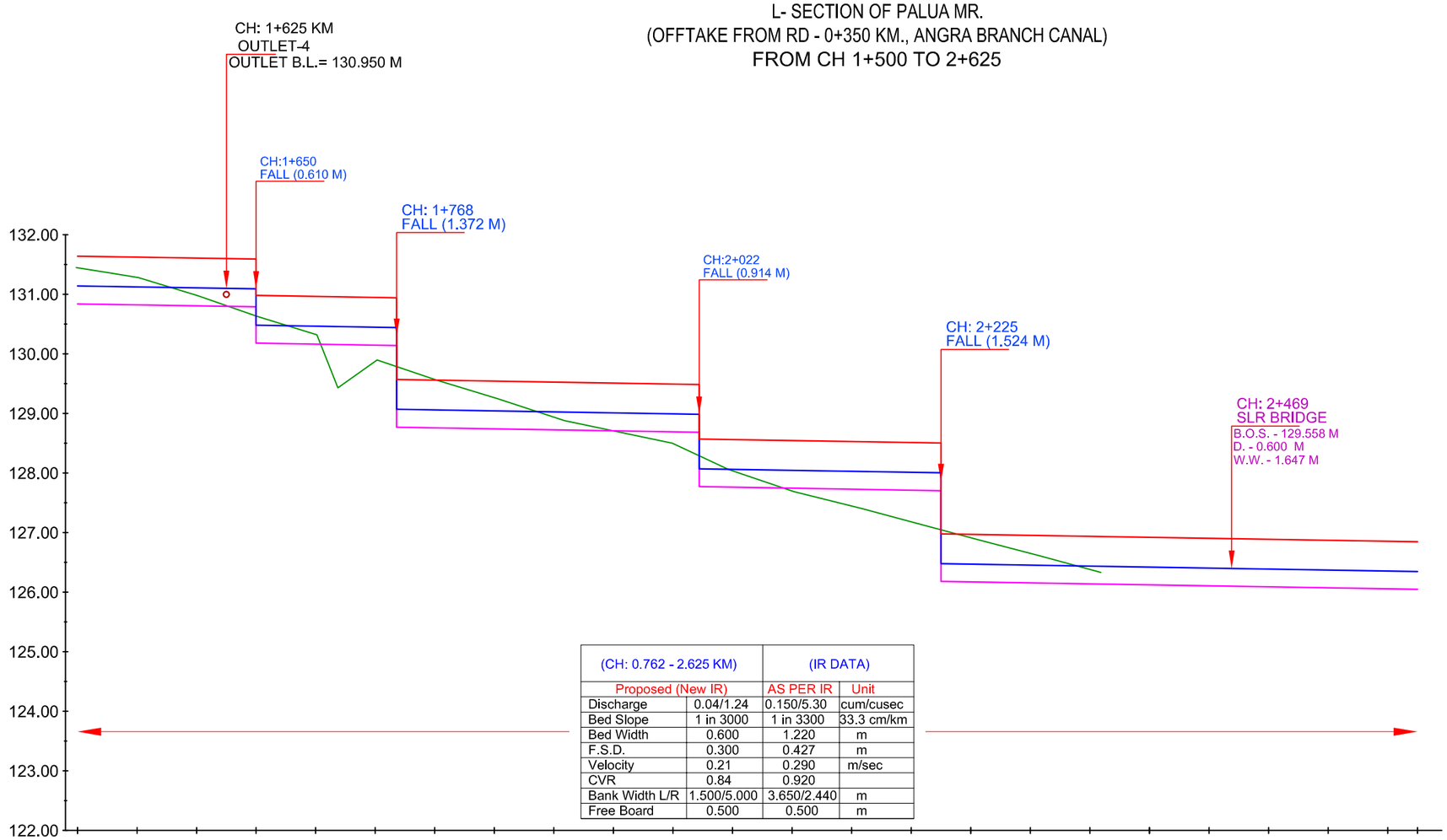
LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF PALUA MR. (OFFTAKE FROM RD -0+350 KM., ANGRA BRANCH CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-01/ LSEC- 01 of 02

L- SECTION OF PALUA MR.
(OFFTAKE FROM RD - 0+350 KM., ANGRA BRANCH CANAL)
FROM CH 1+500 TO 2+625



(CH: 0.762 - 2.625 KM)	(IR DATA)	
Proposed (New IR)	AS PER IR	Unit
Discharge	0.04/1.24	0.150/5.30	cum/cusec
Bed Slope	1 in 3000	1 in 3300	33.3 cm/km
Bed Width	0.600	1.220	m
F.S.D.	0.300	0.427	m
Velocity	0.21	0.290	m/sec
CVR	0.84	0.920	
Bank Width L/R	1.500/5.000	3.650/2.440	m
Free Board	0.500	0.500	m

		1+500	1+550	1+600	1+650	1+700	1+750	1+800	1+850	1+900	1+950	2+000	2+050	2+100	2+150	2+200	2+250	2+300	2+350	2+400	2+450	2+500	2+550	2+600	2+625
DESIGN DATA	TOP OF BANK LEVEL	131.642	131.625	131.608	131.592 / 130.982	130.965	130.948	130.942 / 129.570	129.560	129.543	129.526	129.510	129.493	129.486 / 128.572	128.562	128.546	128.529	128.512	128.504 / 126.980	126.972	126.955	126.938	126.922	126.905	126.888	126.872	126.855	126.847
	F.S.L.	131.142	131.125	131.108	131.092 / 130.482	130.465	130.448	130.442 / 129.070	129.060	129.043	129.026	129.010	128.993	128.986 / 128.072	128.062	128.046	128.029	128.012	128.004 / 126.480	126.472	126.455	126.438	126.422	126.405	126.388	126.372	126.355	126.347
	Proposed Bed Level	130.842	130.825	130.808	130.792 / 130.182	130.165	130.148	130.142 / 128.770	128.760	128.743	128.726	128.710	128.693	128.686 / 127.772	127.762	127.746	127.729	127.712	127.704 / 126.180	126.172	126.155	126.138	126.122	126.105	126.088	126.072	126.055	126.047
EXISTING DATA	Bed Level																											
	TOP OF BANK LEVEL																											
	NSL	131.450	131.360	131.280	130.980	130.630	130.320	129.430 / 129.900	129.560	129.250	128.880	128.710	128.500	128.060	127.690	127.400	127.140	126.870	126.610	126.330								
	Chainage IN KM																											

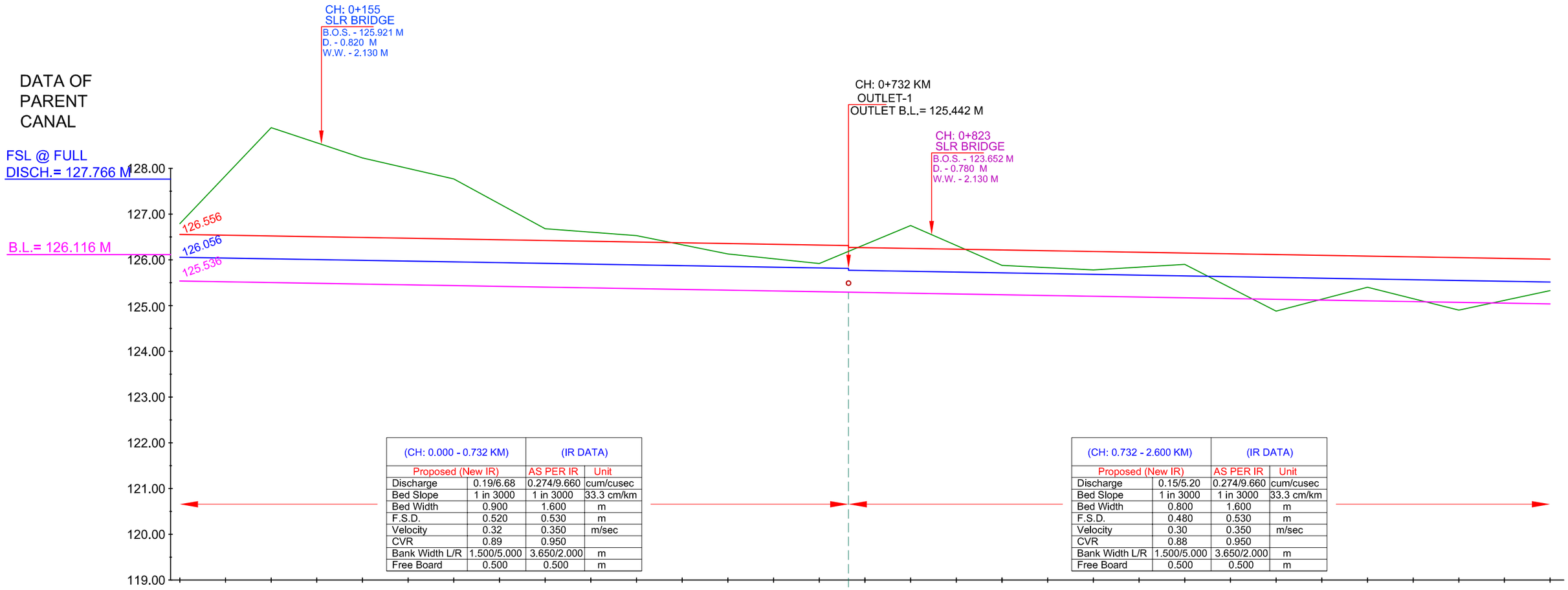
LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF PALUA MR. (OFFTAKE FROM RD -0+350 KM., ANGRA BRANCH CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-01/ LSEC- 02 of 02

L- SECTION OF ASHNI MR.
(OFFTAKE FROM RD - 4+240 KM., ANGRA BRANCH CANAL)
FROM CH 0+000 TO 1+500



(CH: 0.000 - 0.732 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.19/6.68	0.274/9.660	cum/cusec
Bed Slope	1 in 3000	1 in 3000	33.3 cm/km
Bed Width	0.900	1.600	m
F.S.D.	0.520	0.530	m
Velocity	0.32	0.350	m/sec
CVR	0.89	0.950	
Bank Width L/R	1.500/5.000	3.650/2.000	m
Free Board	0.500	0.500	m

(CH: 0.732 - 2.600 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.15/5.20	0.274/9.660	cum/cusec
Bed Slope	1 in 3000	1 in 3000	33.3 cm/km
Bed Width	0.800	1.600	m
F.S.D.	0.480	0.530	m
Velocity	0.30	0.350	m/sec
CVR	0.88	0.950	
Bank Width L/R	1.500/5.000	3.650/2.000	m
Free Board	0.500	0.500	m

		Chainage IN KM	0+000	0+050	0+100	0+150	0+200	0+250	0+300	0+350	0+400	0+450	0+500	0+550	0+600	0+650	0+700	0+732	0+750	0+800	0+850	0+900	0+950	1+000	1+050	1+100	1+150	1+200	1+250	1+300	1+350	1+400	1+450	1+500
DESIGN DATA	TOP OF BANK LEVEL		126.556	126.539	126.523	126.506	126.489	126.473	126.456	126.439	126.423	126.406	126.389	126.373	126.356	126.339	126.323	126.312	126.266	126.249	126.233	126.216	126.199	126.183	126.166	126.149	126.133	126.116	126.099	126.083	126.066	126.049	126.033	126.016
	F.S.L.		126.056	126.039	126.023	126.006	125.989	125.973	125.956	125.939	125.923	125.906	125.889	125.873	125.856	125.839	125.823	125.812	125.766	125.749	125.733	125.716	125.699	125.683	125.666	125.649	125.633	125.616	125.599	125.583	125.566	125.549	125.533	125.516
	Proposed Bed Level		125.536	125.519	125.503	125.486	125.469	125.453	125.436	125.419	125.403	125.386	125.369	125.353	125.336	125.319	125.303	125.292	125.286	125.269	125.253	125.236	125.219	125.203	125.186	125.169	125.153	125.136	125.119	125.103	125.086	125.069	125.053	125.036
EXISTING DATA	Bed Level																																	
	TOP OF BANK LEVEL																																	
	NSL		126.790		128.890		128.230		127.770		126.680		126.530		126.130		125.920			126.750		125.880		125.780		125.900		124.880		125.400		124.900		125.330

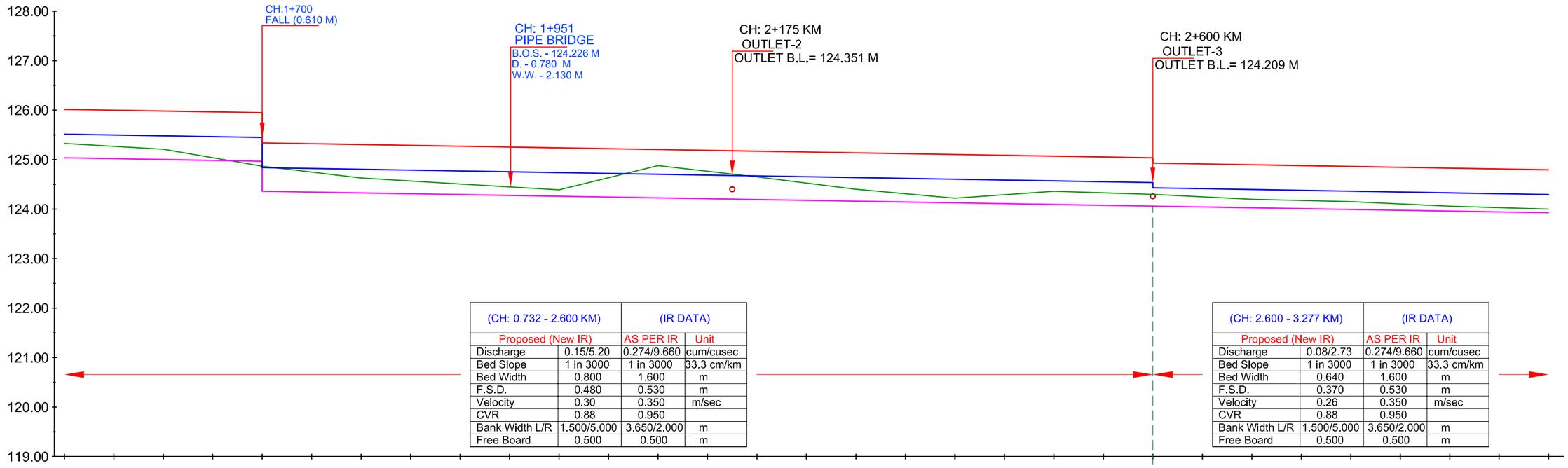
LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF ASHNI MR. (OFFTAKE FROM RD -4+240 KM., ANGRA BRANCH CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-02/ LSEC- 01 of 04

L- SECTION OF ASHNI MR.
(OFFTAKE FROM RD - 4+240 KM., ANGRA BRANCH CANAL)
FROM CH 1+500 TO 3+000



(CH: 0.732 - 2.600 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.15/5.20	0.274/9.660	cum/cusec
Bed Slope	1 in 3000	1 in 3000	33.3 cm/km
Bed Width	0.800	1.600	m
F.S.D.	0.480	0.530	m
Velocity	0.30	0.350	m/sec
CVR	0.88	0.950	
Bank Width L/R	1.500/5.000	3.650/2.000	m
Free Board	0.500	0.500	m

(CH: 2.600 - 3.277 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.08/2.73	0.274/9.660	cum/cusec
Bed Slope	1 in 3000	1 in 3000	33.3 cm/km
Bed Width	0.640	1.600	m
F.S.D.	0.370	0.530	m
Velocity	0.26	0.350	m/sec
CVR	0.88	0.950	
Bank Width L/R	1.500/5.000	3.650/2.000	m
Free Board	0.500	0.500	m

		1+500	1+550	1+600	1+650	1+700	1+750	1+800	1+850	1+900	1+950	2+000	2+050	2+100	2+150	2+200	2+250	2+300	2+350	2+400	2+450	2+500	2+550	2+600	2+650	2+700	2+750	2+800	2+850	2+900	2+950	3+000
DESIGN DATA	TOP OF BANK LEVEL	126.016	125.999	125.983	125.966	125.949	125.339	125.323	125.306	125.289	125.273	125.256	125.239	125.223	125.206	125.189	125.173	125.156	125.139	125.123	125.106	125.089	125.073	125.056	125.039	124.929	124.913	124.896	124.879	124.863	124.846	124.829	124.813	124.796
	F.S.L.	125.516	125.499	125.483	125.466	125.449	124.839	124.823	124.806	124.789	124.773	124.756	124.739	124.723	124.706	124.689	124.673	124.656	124.639	124.623	124.606	124.589	124.573	124.556	124.539	124.429	124.413	124.396	124.379	124.363	124.346	124.329	124.313	124.296
	Proposed Bed Level	125.036	125.019	125.003	124.986	124.969	124.359	124.343	124.326	124.309	124.293	124.276	124.259	124.243	124.226	124.209	124.193	124.176	124.159	124.143	124.126	124.109	124.093	124.076	124.059	124.059	124.043	124.026	124.009	123.993	123.976	123.959	123.943	123.926
EXISTING DATA	Bed Level																																	
	TOP OF BANK LEVEL																																	
	NSL	125.330		125.210		124.870		124.630		124.510		124.390		124.880		124.650		124.400		124.220		124.360		124.300		124.200		124.150		124.060		124.000
	Chainage IN KM	1+500	1+550	1+600	1+650	1+700	1+750	1+800	1+850	1+900	1+950	2+000	2+050	2+100	2+150	2+200	2+250	2+300	2+350	2+400	2+450	2+500	2+550	2+600	2+650	2+700	2+750	2+800	2+850	2+900	2+950	3+000

LEGEND

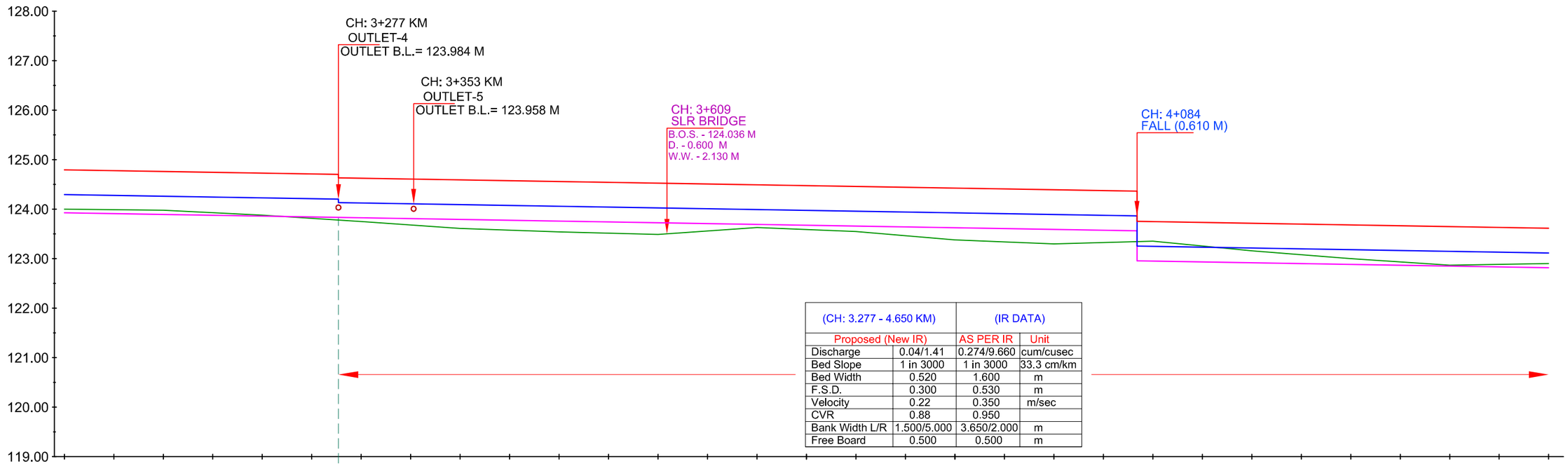
	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF ASHNI MR. (OFFTAKE FROM RD -4+240 KM., ANGRA BRANCH CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-02/ LSEC- 02 of 04

L- SECTION OF ASHNI MR.
(OFFTAKE FROM RD - 4+240 KM., ANGRA BRANCH CANAL)
FROM CH 3+000 TO 4+500

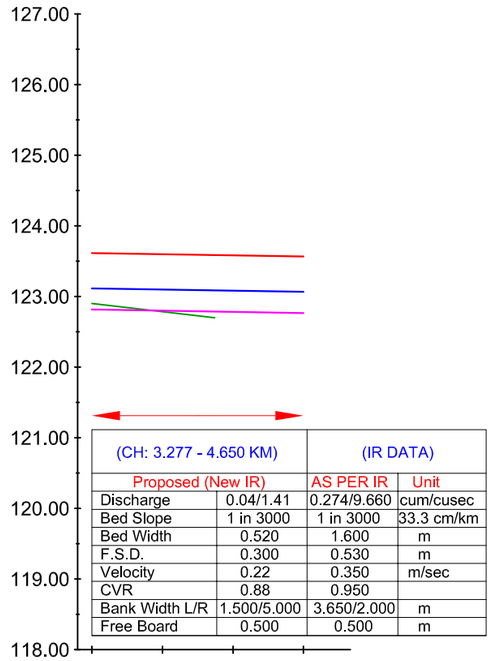
(CH: 2.600 - 3.277 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.08/2.73	0.274/9.660	cum/cusec
Bed Slope	1 in 3000	1 in 3000	33.3 cm/km
Bed Width	0.640	1.600	m
F.S.D.	0.370	0.530	m
Velocity	0.26	0.350	m/sec
CVR	0.88	0.950	
Bank Width L/R	1.500/5.000	3.650/2.000	m
Free Board	0.500	0.500	m



(CH: 3.277 - 4.650 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.04/1.41	0.274/9.660	cum/cusec
Bed Slope	1 in 3000	1 in 3000	33.3 cm/km
Bed Width	0.520	1.600	m
F.S.D.	0.300	0.530	m
Velocity	0.22	0.350	m/sec
CVR	0.88	0.950	
Bank Width L/R	1.500/5.000	3.650/2.000	m
Free Board	0.500	0.500	m

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L- SECTION OF ASHNI MR.
(OFFTAKE FROM RD - 4+240 KM., ANGRA BRANCH CANAL)
FROM CH 4+500 TO 4+600



(CH: 3.277 - 4.650 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.04/1.41	0.274/9.660	cum/cusec
Bed Slope	1 in 3000	1 in 3000	33.3 cm/km
Bed Width	0.520	1.600	m
F.S.D.	0.300	0.530	m
Velocity	0.22	0.350	m/sec
CVR	0.88	0.950	
Bank Width L/R	1.500/5.000	3.650/2.000	m
Free Board	0.500	0.500	m

DESIGN DATA	TOP OF BANK LEVEL	123.616	123.599	123.583	123.566
	F.S.L.	123.116	123.099	123.083	123.066
	Proposed Bed Level	122.816	122.799	122.783	122.766
EXISTING DATA	Bed Level				
	TOP OF BANK LEVEL				
	NSL	122.900		122.700	
	Chainage IN KM	4+500	4+550	4+600	4+650

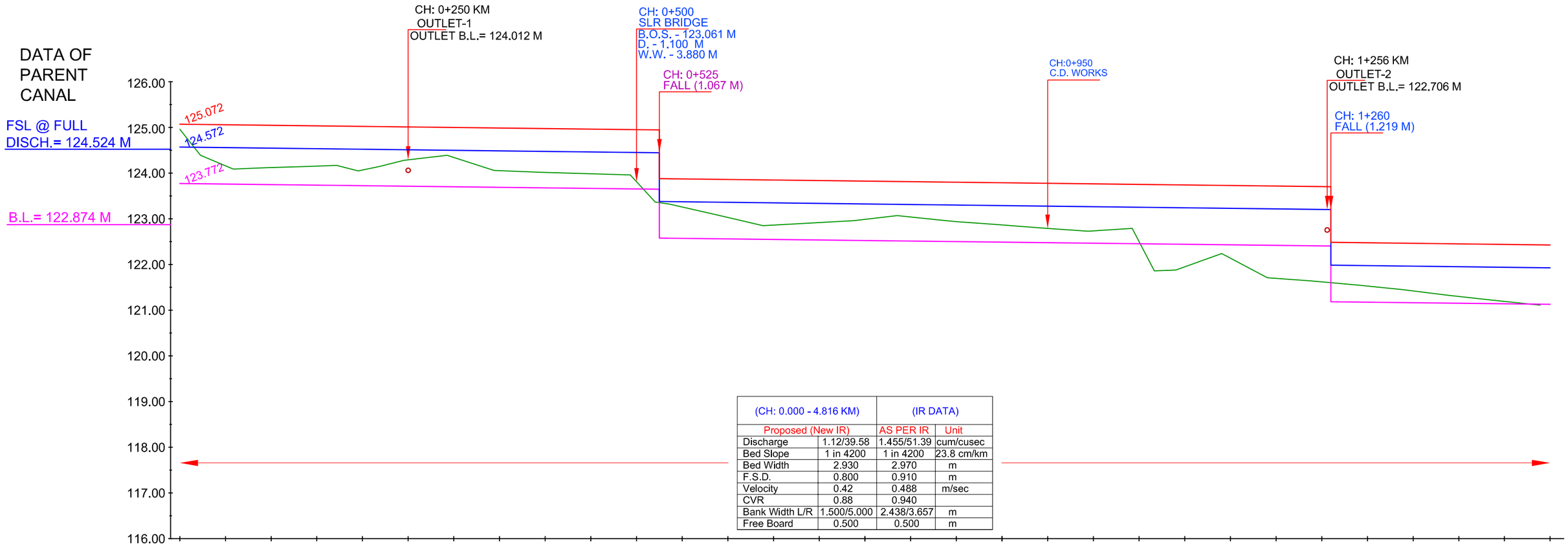
LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF ASHNI MR. (OFFTAKE FROM RD -4+240 KM., ANGRA BRANCH CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-02/ LSEC- 04 of 04

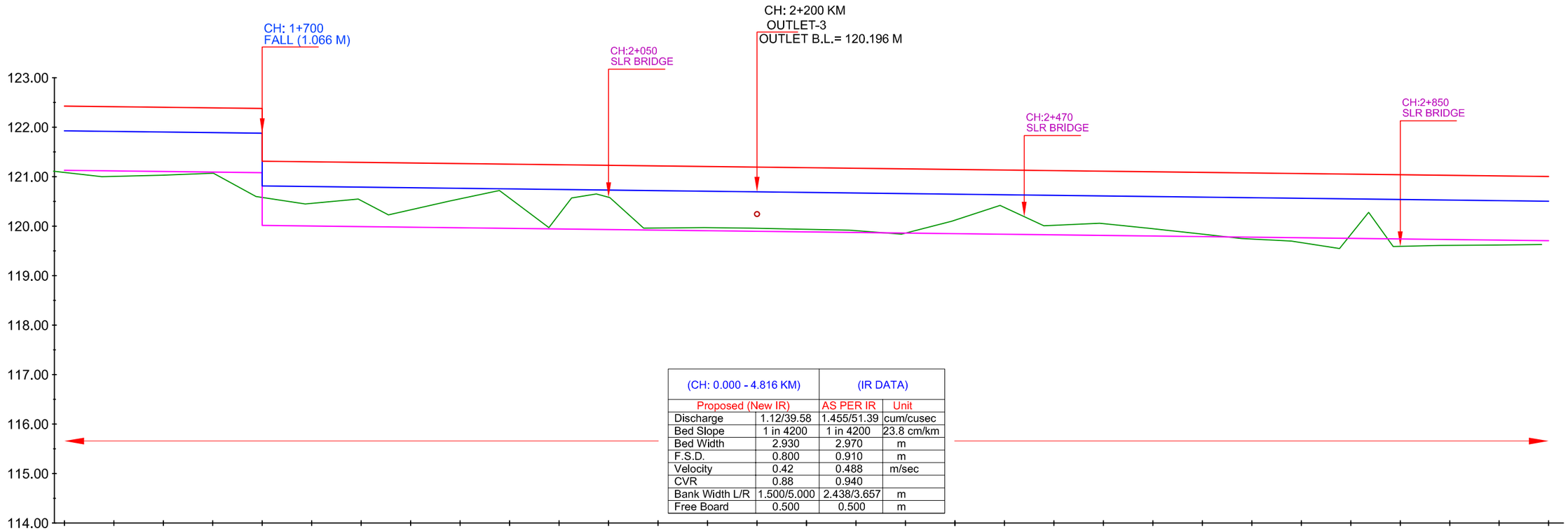
L- SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
FROM CH 0+000 TO 1+500



(CH: 0.000 - 4.816 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	1.12/39.58	1.455/51.39	cum/cusec
Bed Slope	1 in 4200	1 in 4200	23.8 cm/km
Bed Width	2.930	2.970	m
F.S.D.	0.800	0.910	m
Velocity	0.42	0.488	m/sec
CVR	0.88	0.940	
Bank Width L/R	1.500/5.000	2.438/3.657	m
Free Board	0.500	0.500	m

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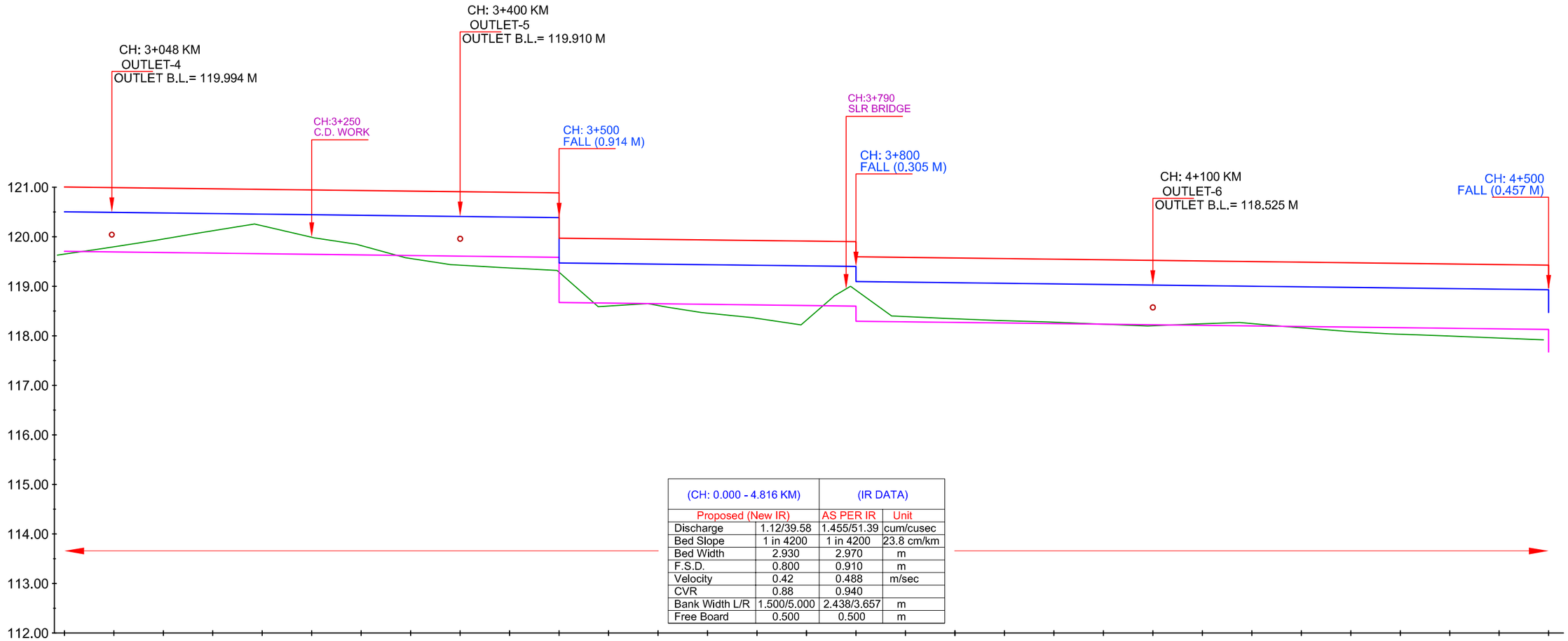
L- SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
FROM CH 1+500 TO 3+000



(CH: 0.000 - 4.816 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	1.12/39.58	1.455/51.39	cum/cusec
Bed Slope	1 in 4200	1 in 4200	23.8 cm/km
Bed Width	2.930	2.970	m
F.S.D.	0.800	0.910	m
Velocity	0.42	0.488	m/sec
CVR	0.88	0.940	
Bank Width L/R	1.500/5.000	2.438/3.657	m
Free Board	0.500	0.500	m

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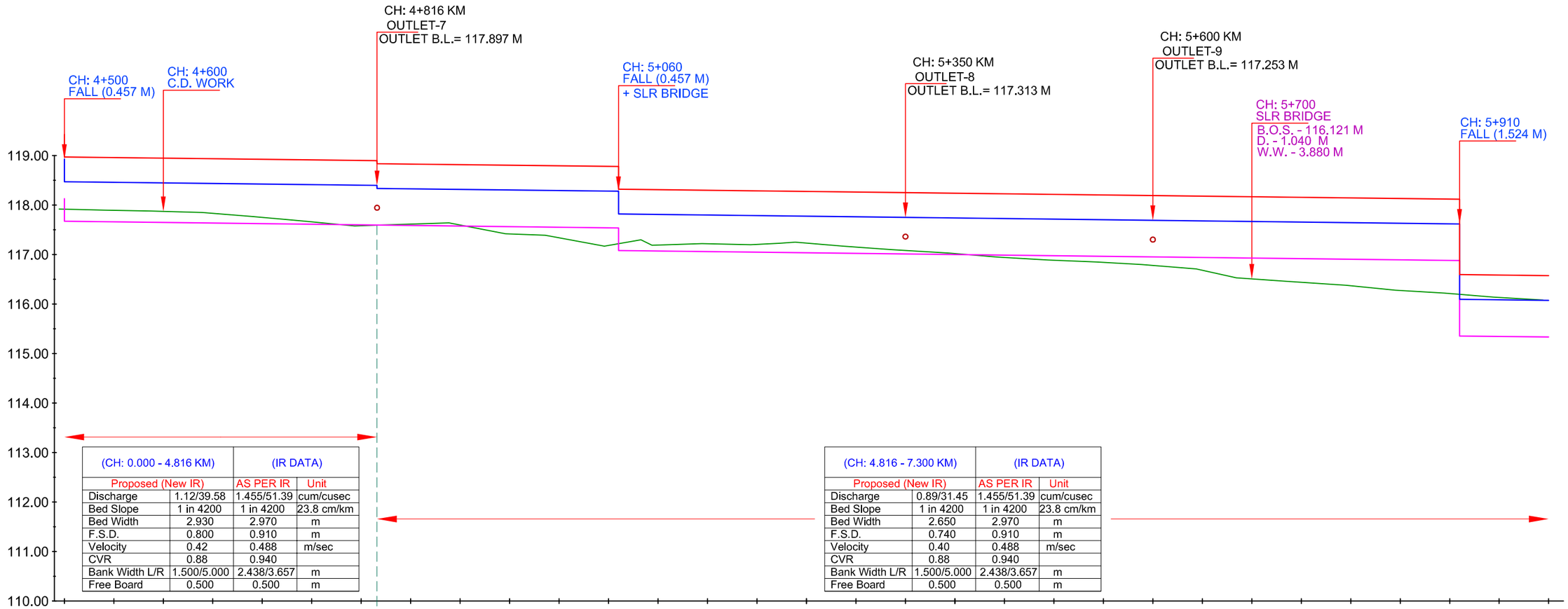
L- SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
FROM CH 3+000 TO 4+500



(CH: 0.000 - 4.816 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	1.12/39.58	1.455/51.39	cum/cusec
Bed Slope	1 in 4200	1 in 4200	23.8 cm/km
Bed Width	2.930	2.970	m
F.S.D.	0.800	0.910	m
Velocity	0.42	0.488	m/sec
CVR	0.88	0.940	
Bank Width L/R	1.500/5.000	2.438/3.657	m
Free Board	0.500	0.500	m

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L- SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
FROM CH 4+500 TO 6+000



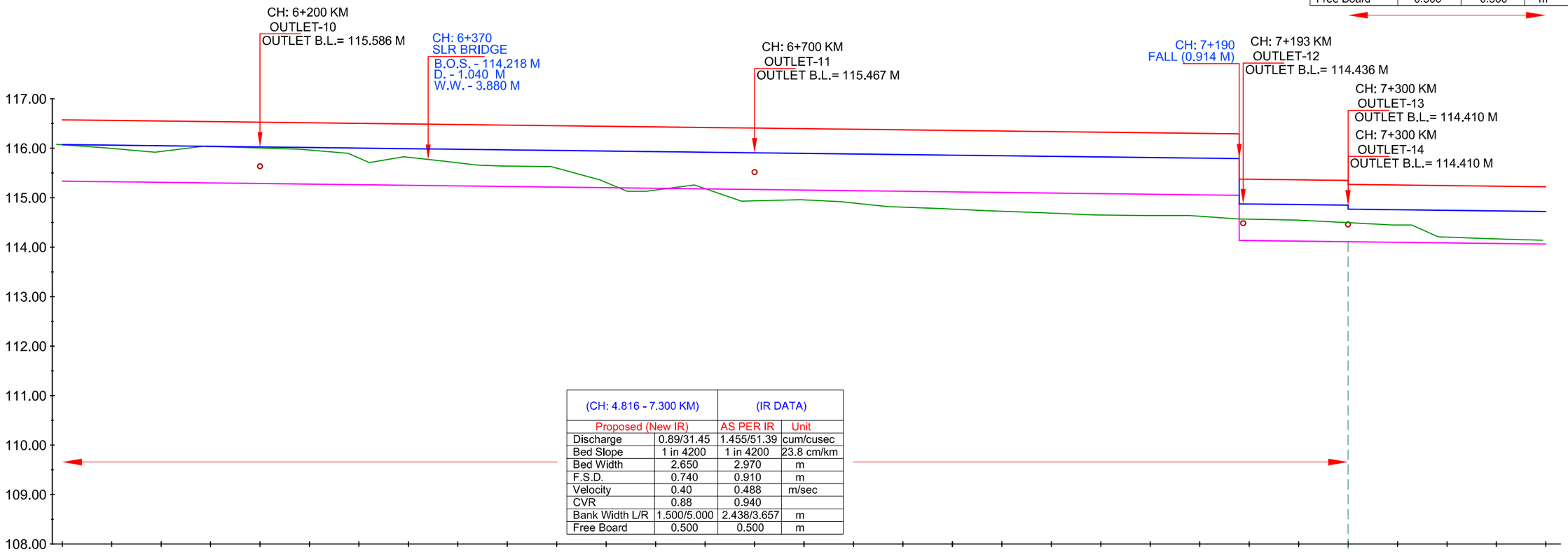
(CH: 0.000 - 4.816 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	1.12/39.58	1.455/51.39	cum/cusec
Bed Slope	1 in 4200	1 in 4200	23.8 cm/km
Bed Width	2.930	2.970	m
F.S.D.	0.800	0.910	m
Velocity	0.42	0.488	m/sec
CVR	0.88	0.940	
Bank Width L/R	1.500/5.000	2.438/3.657	m
Free Board	0.500	0.500	m

(CH: 4.816 - 7.300 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.89/31.45	1.455/51.39	cum/cusec
Bed Slope	1 in 4200	1 in 4200	23.8 cm/km
Bed Width	2.650	2.970	m
F.S.D.	0.740	0.910	m
Velocity	0.40	0.488	m/sec
CVR	0.88	0.940	
Bank Width L/R	1.500/5.000	2.438/3.657	m
Free Board	0.500	0.500	m

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L- SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
FROM CH 6+000 TO 7+500

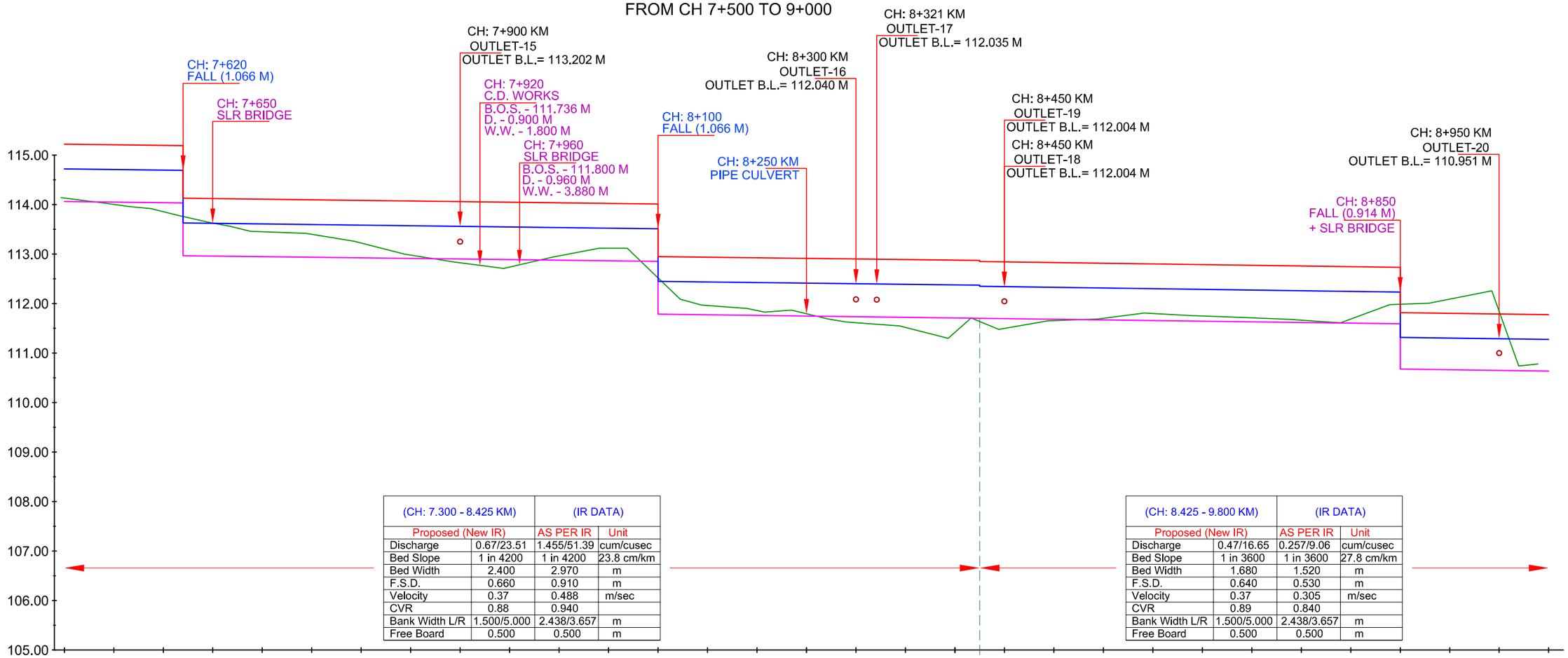
(CH: 7.300 - 8.425 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.67/23.51	1.455/51.39	cum/cusec
Bed Slope	1 in 4200	1 in 4200	23.8 cm/km
Bed Width	2.400	2.970	m
F.S.D.	0.660	0.910	m
Velocity	0.37	0.488	m/sec
CVR	0.88	0.940	
Bank Width L/R	1.500/5.000	2.438/3.657	m
Free Board	0.500	0.500	m



(CH: 4.816 - 7.300 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.89/31.45	1.455/51.39	cum/cusec
Bed Slope	1 in 4200	1 in 4200	23.8 cm/km
Bed Width	2.650	2.970	m
F.S.D.	0.740	0.910	m
Velocity	0.40	0.488	m/sec
CVR	0.88	0.940	
Bank Width L/R	1.500/5.000	2.438/3.657	m
Free Board	0.500	0.500	m

| | | |

L- SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
FROM CH 7+500 TO 9+000



(CH: 7.300 - 8.425 KM)	(IR DATA)	
Proposed (New IR)	AS PER IR	Unit
Discharge	0.67/23.51	1.455/51.39	cum/cusec
Bed Slope	1 in 4200	1 in 4200	23.8 cm/km
Bed Width	2.400	2.970	m
F.S.D.	0.660	0.910	m
Velocity	0.37	0.488	m/sec
CVR	0.88	0.940	
Bank Width L/R	1.500/5.000	2.438/3.657	m
Free Board	0.500	0.500	m

(CH: 8.425 - 9.800 KM)	(IR DATA)	
Proposed (New IR)	AS PER IR	Unit
Discharge	0.47/16.65	0.257/9.06	cum/cusec
Bed Slope	1 in 3600	1 in 3600	27.8 cm/km
Bed Width	1.680	1.520	m
F.S.D.	0.640	0.530	m
Velocity	0.37	0.305	m/sec
CVR	0.89	0.840	
Bank Width L/R	1.500/5.000	2.438/3.657	m
Free Board	0.500	0.500	m

		7+500	7+550	7+600	7+650	7+700	7+750	7+800	7+850	7+900	7+950	8+000	8+050	8+100	8+150	8+200	8+250	8+300	8+350	8+400	8+425	8+450	8+500	8+550	8+600	8+650	8+700	8+750	8+800	8+850	8+900	8+950	9+000
DESIGN DATA	TOP OF BANK LEVEL	115.223	115.211	115.199	115.194 114.128	114.121	114.109	114.097	114.085	114.074	114.062	114.050	114.038	114.026	114.014 112.948	112.936	112.924	112.912	112.900	112.888	112.877	112.871 112.851	112.844	112.830	112.816	112.802	112.788	112.774	112.760	112.746	112.733 111.819	111.805	111.791	111.777
	F.S.L.	114.723	114.711	114.699	114.694 113.628	113.621	113.609	113.597	113.585	113.574	113.562	113.550	113.538	113.526	113.514 112.448	112.436	112.424	112.412	112.400	112.388	112.377	112.351 112.371	112.344	112.330	112.316	112.302	112.288	112.274	112.260	112.246	112.233 111.319	111.305	111.291	111.277
	Proposed Bed Level	114.063	114.051	114.039	114.034 112.968	112.961	112.949	112.937	112.925	112.914	112.902	112.890	112.878	112.866	112.854 111.788	111.776	111.764	111.752	111.740	111.728	111.717	111.711 111.711	111.704	111.690	111.676	111.662	111.648	111.634	111.620	111.606	111.593 110.679	110.665	110.651	110.637
EXISTING DATA	Bed Level																																
	TOP OF BANK LEVEL																																
	NSL	114.140	114.030	113.960	113.920	113.790	113.650	113.560	113.460	113.420	113.260	113.000	112.840	112.710	112.940	113.120	113.120	112.620	112.090	111.970	111.900	111.830	111.870	111.690	111.630	111.550	111.300	111.710	111.480	111.650	111.690	111.810	111.760	111.720	111.680	111.610	111.980	112.010	112.260	110.740	110.780
	Chainage IN KM	7+500	7+550	7+600	7+650	7+700	7+750	7+800	7+850	7+900	7+950	8+000	8+050	8+100	8+150	8+200	8+250	8+300	8+350	8+400	8+425	8+450	8+500	8+550	8+600	8+650	8+700	8+750	8+800	8+850	8+900	8+950	9+000

LEGEND

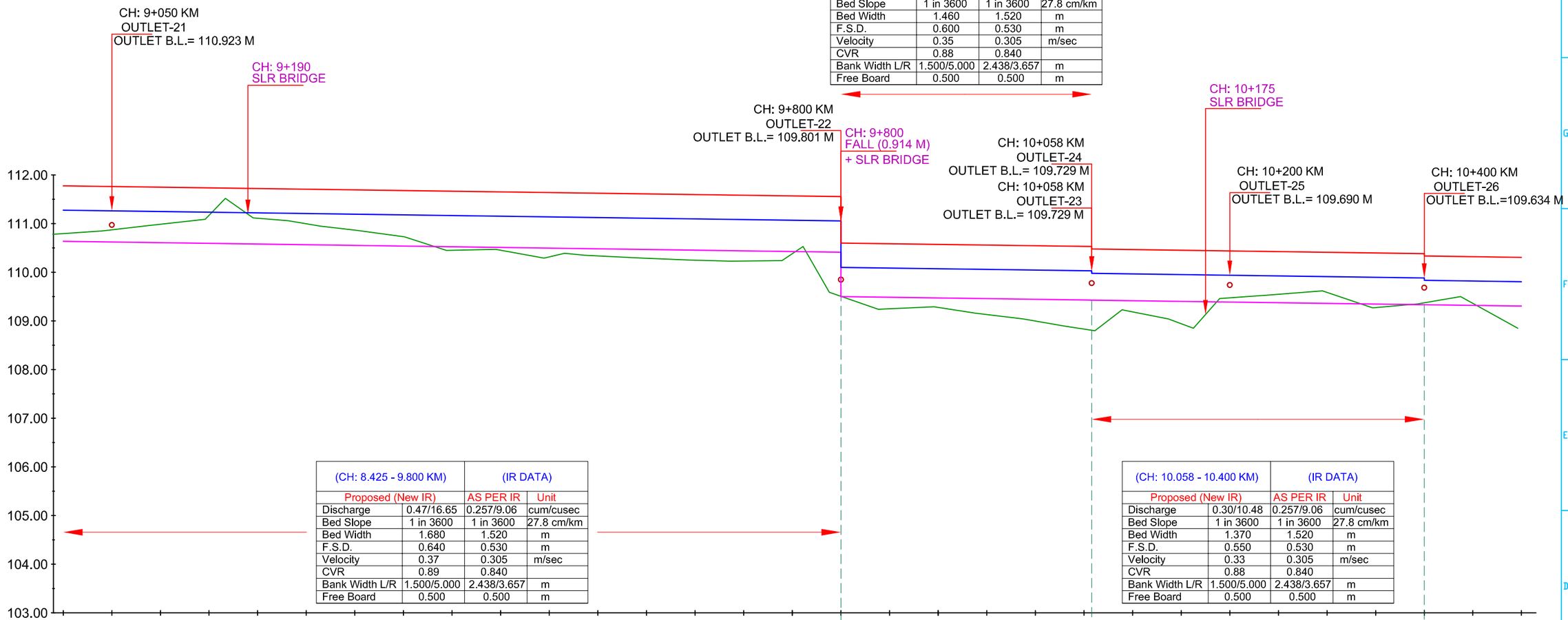
	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ LSEC- 06 of 09

L- SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
FROM CH 9+000 TO 10+500

(CH: 9.800 - 10.058 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.37/12.90	0.257/9.06	cum/cusec
Bed Slope	1 in 3600	1 in 3600	27.8 cm/km
Bed Width	1.460	1.520	m
F.S.D.	0.600	0.530	m
Velocity	0.35	0.305	m/sec
CVR	0.88	0.840	
Bank Width L/R	1.500/5.000	2.438/3.657	m
Free Board	0.500	0.500	m



(CH: 8.425 - 9.800 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.47/16.65	0.257/9.06	cum/cusec
Bed Slope	1 in 3600	1 in 3600	27.8 cm/km
Bed Width	1.680	1.520	m
F.S.D.	0.640	0.530	m
Velocity	0.37	0.305	m/sec
CVR	0.89	0.840	
Bank Width L/R	1.500/5.000	2.438/3.657	m
Free Board	0.500	0.500	m

(CH: 10.058 - 10.400 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.30/10.48	0.257/9.06	cum/cusec
Bed Slope	1 in 3600	1 in 3600	27.8 cm/km
Bed Width	1.370	1.520	m
F.S.D.	0.550	0.530	m
Velocity	0.33	0.305	m/sec
CVR	0.88	0.840	
Bank Width L/R	1.500/5.000	2.438/3.657	m
Free Board	0.500	0.500	m

| | | |

L- SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
FROM CH 10+500 TO 12+000

(CH: 10.400 - 10.650 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.23/8.26	0.257/9.06	cum/cusec
Bed Slope	1 in 3600	1 in 3600	27.8 cm/km
Bed Width	1.260	1.520	m
F.S.D.	0.500	0.530	m
Velocity	0.31	0.305	m/sec
CVR	0.88	0.840	
Bank Width L/R	1.500/5.000	2.438/3.657	m
Free Board	0.500	0.500	m

(CH: 11.500 - 11.750 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.07/2.31	0.257/9.06	cum/cusec
Bed Slope	1 in 3600	1 in 3600	27.8 cm/km
Bed Width	0.820	1.520	m
F.S.D.	0.300	0.530	m
Velocity	0.22	0.305	m/sec
CVR	0.88	0.840	
Bank Width L/R	1.500/5.000	2.438/3.657	m
Free Board	0.500	0.500	m

CH: 10+650 KM
OUTLET-28
OUTLET B.L.= 109.415 M

CH: 10+650 KM
OUTLET-27
OUTLET B.L.= 109.415 M

CH: 11+100 KM
OUTLET-30
OUTLET B.L.= 109.290 M

CH: 11+100 KM
OUTLET-29
OUTLET B.L.= 109.290 M

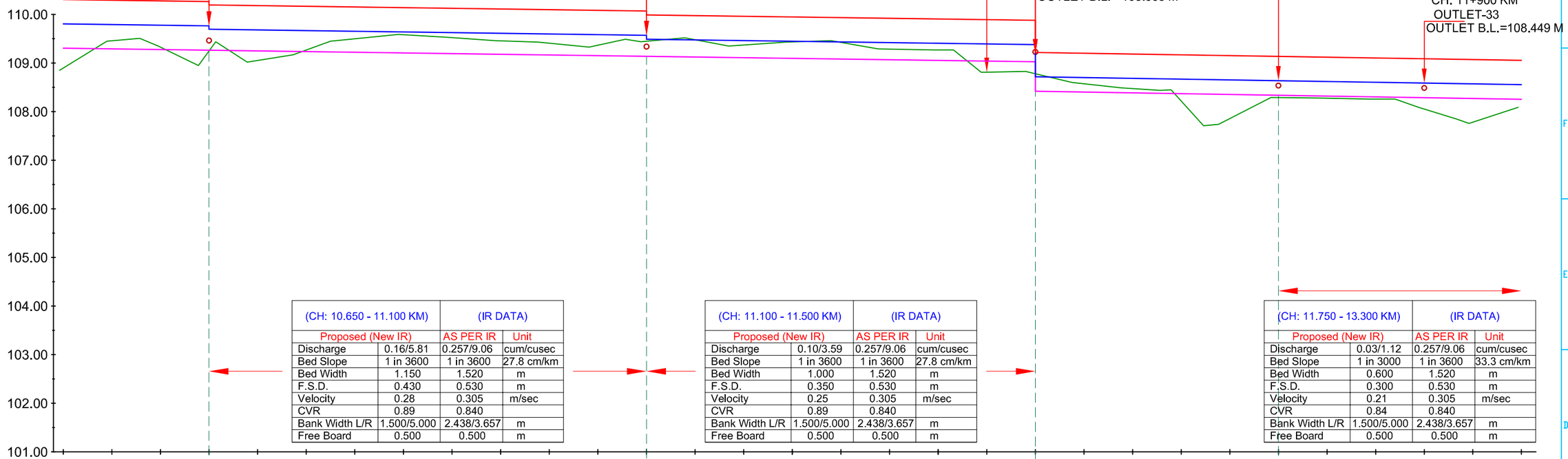
CH:11+450
SLR BRIDGE

CH: 11+500
FALL (0.610 M)

CH: 11+500 KM
OUTLET-31
OUTLET B.L.= 108.568 M

CH: 11+750 KM
OUTLET-32
OUTLET B.L.= 108.499 M

CH: 11+900 KM
OUTLET-33
OUTLET B.L.=108.449 M



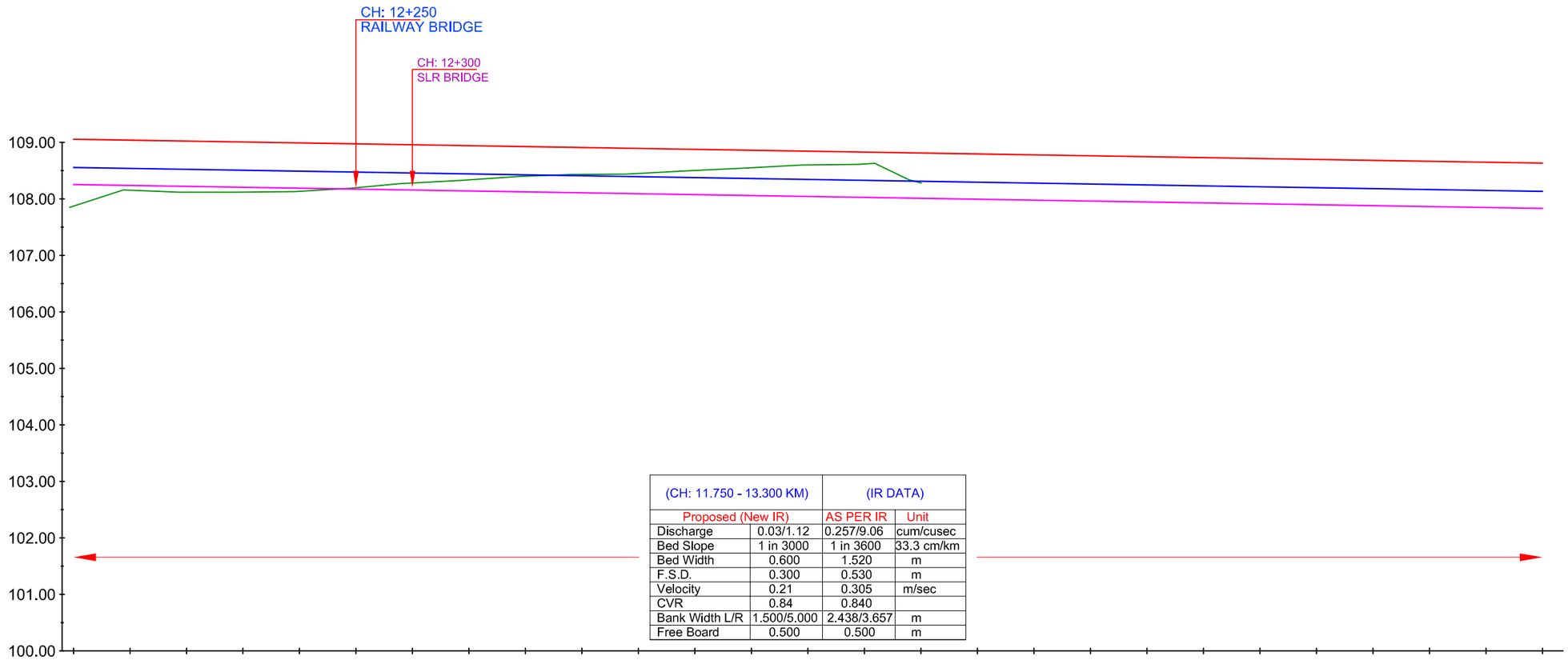
(CH: 10.650 - 11.100 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.16/5.81	0.257/9.06	cum/cusec
Bed Slope	1 in 3600	1 in 3600	27.8 cm/km
Bed Width	1.150	1.520	m
F.S.D.	0.430	0.530	m
Velocity	0.28	0.305	m/sec
CVR	0.89	0.840	
Bank Width L/R	1.500/5.000	2.438/3.657	m
Free Board	0.500	0.500	m

(CH: 11.100 - 11.500 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.10/3.59	0.257/9.06	cum/cusec
Bed Slope	1 in 3600	1 in 3600	27.8 cm/km
Bed Width	1.000	1.520	m
F.S.D.	0.350	0.530	m
Velocity	0.25	0.305	m/sec
CVR	0.89	0.840	
Bank Width L/R	1.500/5.000	2.438/3.657	m
Free Board	0.500	0.500	m

(CH: 11.750 - 13.300 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.03/1.12	0.257/9.06	cum/cusec
Bed Slope	1 in 3000	1 in 3600	33.3 cm/km
Bed Width	0.600	1.520	m
F.S.D.	0.300	0.530	m
Velocity	0.21	0.305	m/sec
CVR	0.84	0.840	
Bank Width L/R	1.500/5.000	2.438/3.657	m
Free Board	0.500	0.500	m

| | | |

L- SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
FROM CH 12+000 TO 13+300



(CH: 11.750 - 13.300 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.03/1.12	0.257/9.06	cum/cusec
Bed Slope	1 in 3000	1 in 3600	33.3 cm/km
Bed Width	0.600	1.520	m
F.S.D.	0.300	0.530	m
Velocity	0.21	0.305	m/sec
CVR	0.84	0.840	
Bank Width L/R	1.500/5.000	2.438/3.657	m
Free Board	0.500	0.500	m

		12+000	12+050	12+100	12+150	12+200	12+250	12+300	12+350	12+400	12+450	12+500	12+550	12+600	12+650	12+700	12+750	12+800	12+850	12+900	12+950	13+000	13+050	13+100	13+150	13+200	13+250	13+300
DESIGN DATA	TOP OF BANK LEVEL	109.066	109.049	109.032	109.016	108.999	108.982	108.966	108.949	108.932	108.916	108.899	108.882	108.866	108.849	108.832	108.816	108.799	108.782	108.766	108.749	108.732	108.716	108.699	108.682	108.666	108.649	108.632
	F.S.L.	108.566	108.549	108.532	108.516	108.499	108.482	108.466	108.449	108.432	108.416	108.399	108.382	108.366	108.349	108.332	108.316	108.299	108.282	108.266	108.249	108.232	108.216	108.199	108.182	108.166	108.149	108.132
	Proposed Bed Level	108.266	108.249	108.232	108.216	108.199	108.182	108.166	108.149	108.132	108.116	108.099	108.082	108.066	108.049	108.032	108.016	107.999	107.982	107.966	107.949	107.932	107.916	107.899	107.882	107.866	107.849	107.832
EXISTING DATA	Bed Level																											
	TOP OF BANK LEVEL																											
	NSL	108.090	108.400	108.360	108.360	108.370	108.430	108.510	108.570	108.640	108.670	108.680	108.730	108.790	108.840	108.850 108.870	108.580 108.520											
	Chainage IN KM	12+000	12+050	12+100	12+150	12+200	12+250	12+300	12+350	12+400	12+450	12+500	12+550	12+600	12+650	12+700	12+750	12+800	12+850	12+900	12+950	13+000	13+050	13+100	13+150	13+200	13+250	13+300

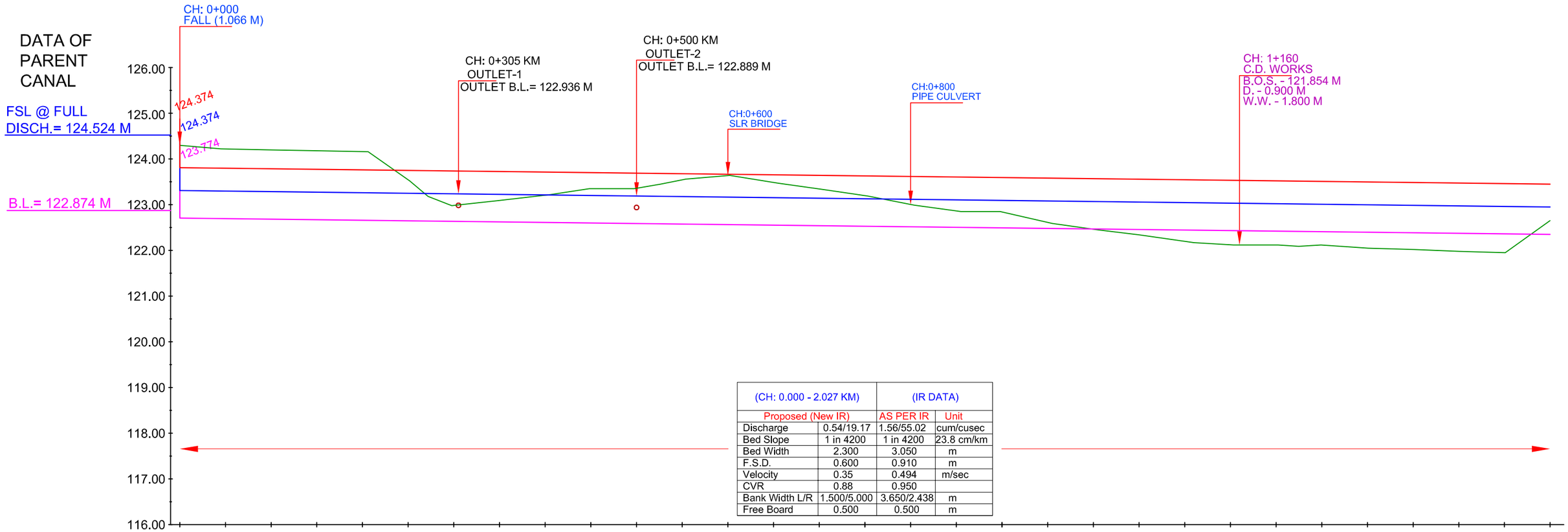
LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ LSEC- 09 of 09

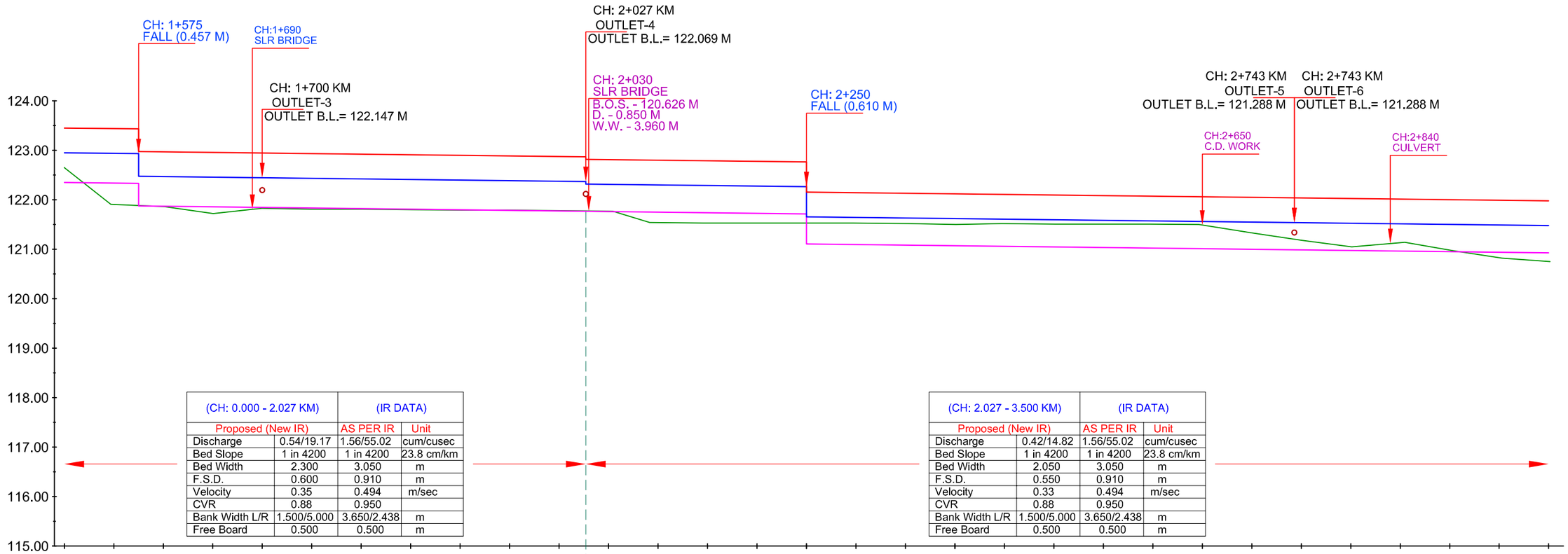
L- SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
FROM CH 0+000 TO 1+500



(CH: 0.000 - 2.027 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.54/19.17	1.56/55.02	cum/cusec
Bed Slope	1 in 4200	1 in 4200	23.8 cm/km
Bed Width	2.300	3.050	m
F.S.D.	0.600	0.910	m
Velocity	0.35	0.494	m/sec
CVR	0.88	0.950	
Bank Width L/R	1.500/5.000	3.650/2.438	m
Free Board	0.500	0.500	m

| | | |

L- SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
FROM CH 1+500 TO 3+000



(CH: 0.000 - 2.027 KM)	(IR DATA)	
Proposed (New IR)	AS PER IR	Unit
Discharge	0.54/19.17	1.56/55.02	cum/cusec
Bed Slope	1 in 4200	1 in 4200	23.8 cm/km
Bed Width	2.300	3.050	m
F.S.D.	0.600	0.910	m
Velocity	0.35	0.494	m/sec
CVR	0.88	0.950	
Bank Width L/R	1.500/5.000	3.650/2.438	m
Free Board	0.500	0.500	m

(CH: 2.027 - 3.500 KM)	(IR DATA)	
Proposed (New IR)	AS PER IR	Unit
Discharge	0.42/14.82	1.56/55.02	cum/cusec
Bed Slope	1 in 4200	1 in 4200	23.8 cm/km
Bed Width	2.050	3.050	m
F.S.D.	0.550	0.910	m
Velocity	0.33	0.494	m/sec
CVR	0.88	0.950	
Bank Width L/R	1.500/5.000	3.650/2.438	m
Free Board	0.500	0.500	m

		1+500	1+550	1+600	1+650	1+700	1+750	1+800	1+850	1+900	1+950	2+000	2+027	2+050	2+100	2+150	2+200	2+250	2+300	2+350	2+400	2+450	2+500	2+550	2+600	2+650	2+700	2+750	2+800	2+850	2+900	2+950	3+000
DESIGN DATA	TOP OF BANK LEVEL	123.451	123.439	123.433 / 122.976	122.971	122.959	122.947	122.935	122.923	122.911	122.899	122.887	122.875	122.869 / 122.819	122.813	122.801	122.790	122.778	122.766 / 122.156	122.144	122.132	122.120	122.108	122.096	122.084	122.072	122.061	122.049	122.038	122.025	122.013	122.001	121.989	121.977
	F.S.L.	122.951	122.939	122.933 / 122.476	122.471	122.459	122.447	122.435	122.423	122.411	122.399	122.387	122.375	122.369 / 122.319	122.313	122.301	122.290	122.278	122.266 / 121.656	121.644	121.632	121.620	121.608	121.596	121.584	121.572	121.561	121.549	121.537	121.525	121.513	121.501	121.489	121.477
	Proposed Bed Level	122.351	122.339	122.333 / 121.876	121.871	121.859	121.847	121.835	121.823	121.811	121.799	121.787	121.775	121.769 / 121.769	121.763	121.751	121.740	121.728	121.716 / 121.106	121.094	121.082	121.070	121.058	121.046	121.034	121.022	121.011	120.999	120.987	120.975	120.963	120.951	120.939	120.927
EXISTING DATA	Bed Level																																	
	TOP OF BANK LEVEL																																	
	NSL	122.650	121.910	121.860	121.720	121.830	121.810	121.810	121.800	121.790	121.790	121.780		121.770	121.540	121.530	121.530	121.530	121.530	121.530	121.520	121.500	121.520	121.510	121.510	121.510	121.500	121.330	121.180	121.050	121.140	120.970	120.820	120.750
	Chainage IN KM	1+500	1+550	1+600	1+650	1+700	1+750	1+800	1+850	1+900	1+950	2+000	2+027	2+050	2+100	2+150	2+200	2+250	2+300	2+350	2+400	2+450	2+500	2+550	2+600	2+650	2+700	2+750	2+800	2+850	2+900	2+950	3+000

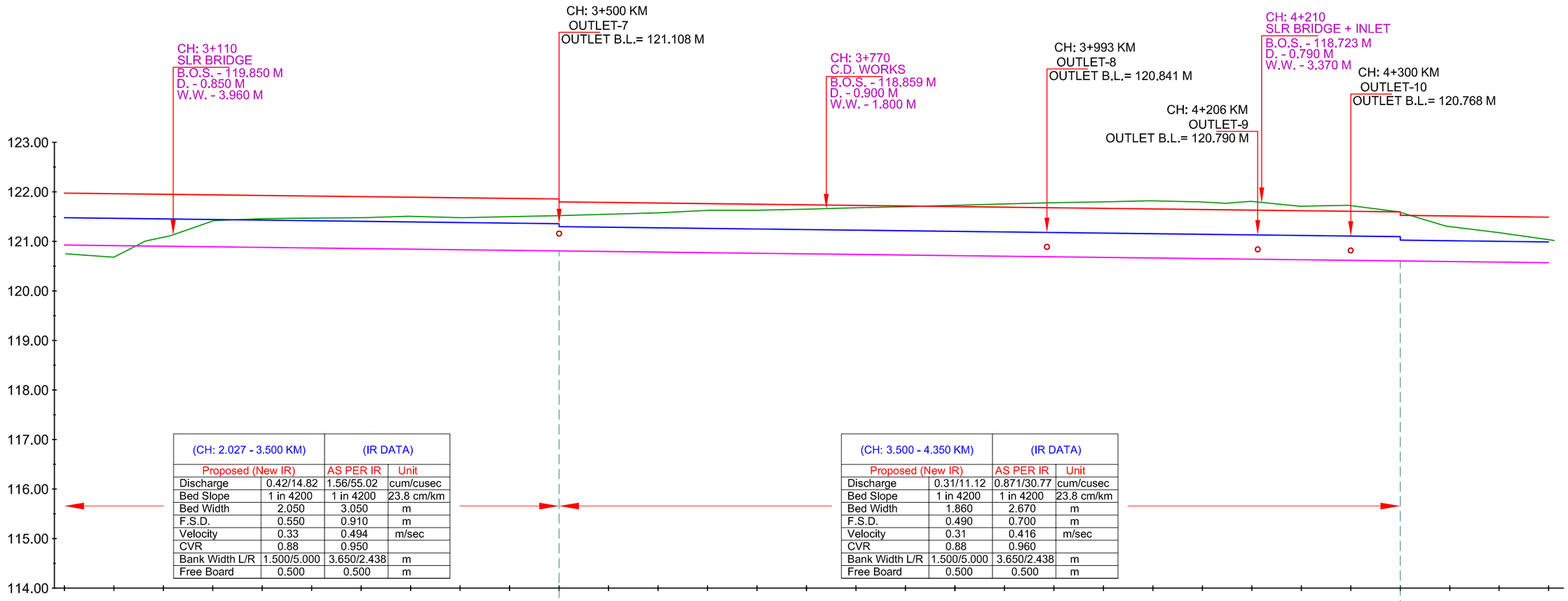
LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF KAILASHPUR SUB DY. (OFFTAKE FROM RD -9+050 KM., ANGRA BRANCH CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-04/ LSEC- 02 of 06

L- SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
FROM CH 3+000 TO 4+500



(CH: 2.027 - 3.500 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.42/14.82	1.56/55.02	cum/cusec
Bed Slope	1 in 4200	1 in 4200	23.8 cm/km
Bed Width	2.050	3.050	m
F.S.D.	0.550	0.910	m
Velocity	0.33	0.494	m/sec
CVR	0.88	0.950	
Bank Width L/R	1.500/5.000	3.650/2.438	m
Free Board	0.500	0.500	m

(CH: 3.500 - 4.350 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.31/11.12	0.871/30.77	cum/cusec
Bed Slope	1 in 4200	1 in 4200	23.8 cm/km
Bed Width	1.860	2.670	m
F.S.D.	0.490	0.700	m
Velocity	0.31	0.416	m/sec
CVR	0.88	0.960	
Bank Width L/R	1.500/5.000	3.650/2.438	m
Free Board	0.500	0.500	m

		3+000	3+050	3+100	3+150	3+200	3+250	3+300	3+350	3+400	3+450	3+500	3+550	3+600	3+650	3+700	3+750	3+800	3+850	3+900	3+950	4+000	4+050	4+100	4+150	4+200	4+250	4+300	4+350	4+400	4+450	4+500
DESIGN DATA	TOP OF BANK LEVEL	121.977	121.965	121.953	121.941	121.930	121.918	121.906	121.894	121.882	121.870	121.858	121.786	121.774	121.762	121.751	121.739	121.727	121.715	121.703	121.691	121.679	121.667	121.655	121.643	121.631	121.620	121.608	121.596	121.514	121.502	121.490
	F.S.L.	121.477	121.465	121.453	121.441	121.430	121.418	121.406	121.394	121.382	121.370	121.358	121.286	121.274	121.262	121.251	121.239	121.227	121.215	121.203	121.191	121.179	121.167	121.155	121.143	121.131	121.120	121.108	121.096	121.014	121.002	120.990
	Proposed Bed Level	120.927	120.915	120.903	120.891	120.880	120.868	120.856	120.844	120.832	120.820	120.808	120.796	120.784	120.772	120.761	120.749	120.737	120.725	120.713	120.701	120.689	120.677	120.665	120.653	120.641	120.630	120.618	120.606	120.594	120.582	120.570
EXISTING DATA	Bed Level																															
	TOP OF BANK LEVEL																															
	NSL	120.750	120.680	121.010	121.110	121.420	121.460	121.470	121.480	121.510	121.480	121.500	121.520	121.550	121.580	121.630	121.630	121.650	121.680	121.700	121.730	121.760	121.780	121.800	121.820	121.800	121.770	121.810	121.710	121.730	121.600	121.310	121.180	121.020
	Chainage IN KM	3+000	3+050	3+100	3+150	3+200	3+250	3+300	3+350	3+400	3+450	3+500	3+550	3+600	3+650	3+700	3+750	3+800	3+850	3+900	3+950	4+000	4+050	4+100	4+150	4+200	4+250	4+300	4+350	4+400	4+450	4+500

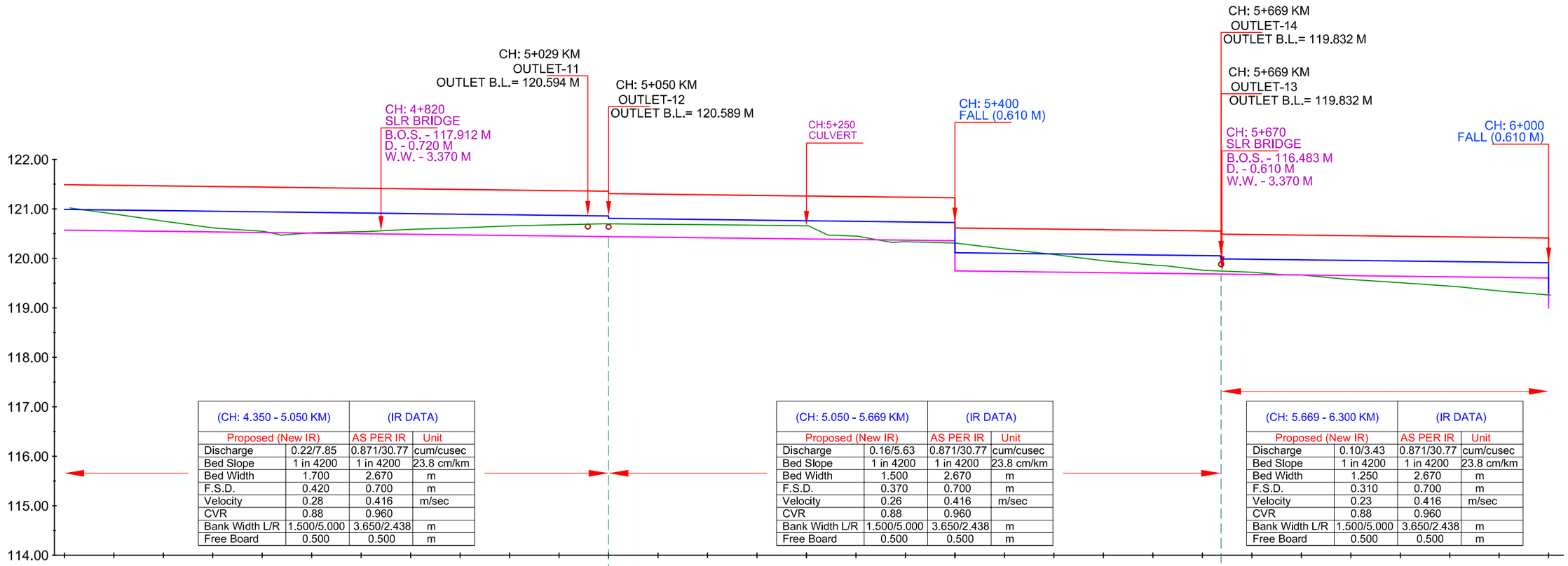
LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF KAILASHPUR SUB DY. (OFFTAKE FROM RD -9+050 KM., ANGRA BRANCH CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-04/ LSEC- 03 of 06

L- SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
FROM CH 4+500 TO 6+000



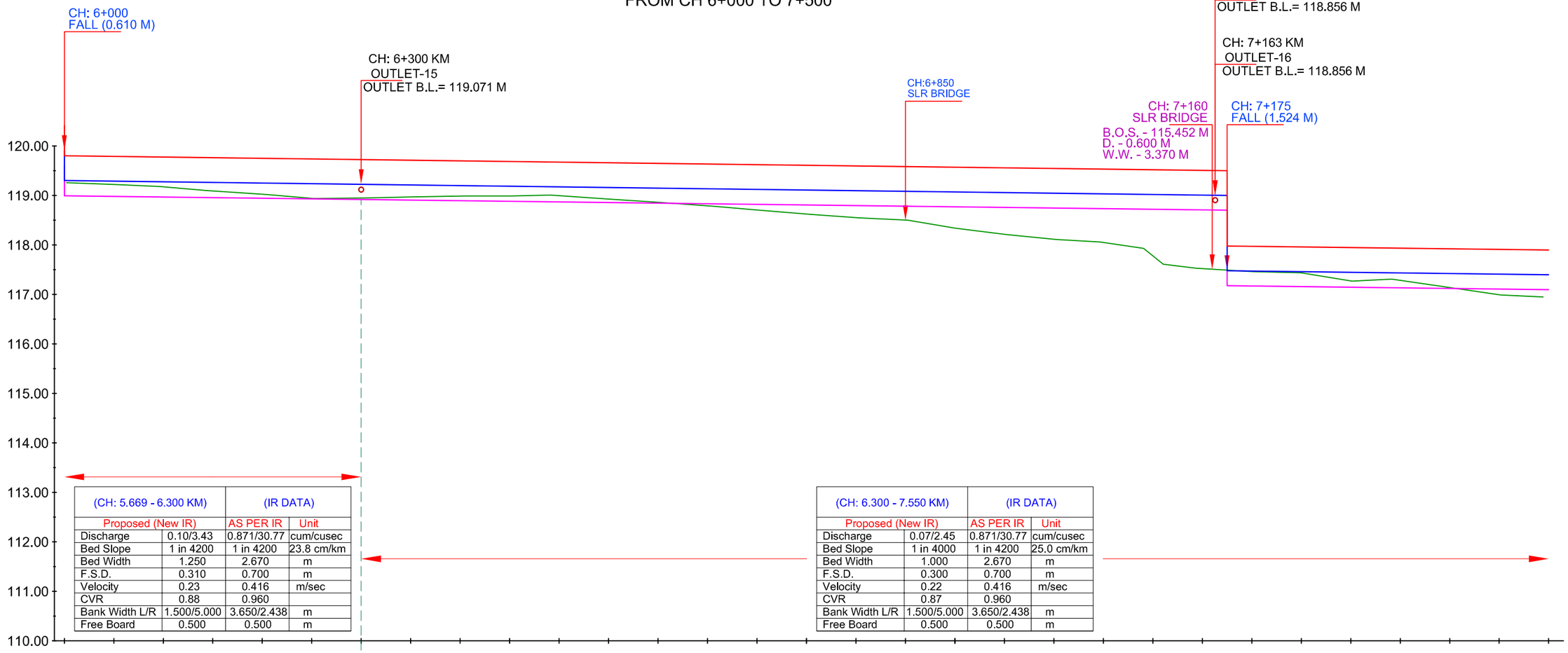
(CH: 4.350 - 5.050 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.22/7.85	0.871/30.77	cum/cusec
Bed Slope	1 in 4200	1 in 4200	23.8 cm/km
Bed Width	1.700	2.670	m
F.S.D.	0.420	0.700	m
Velocity	0.28	0.416	m/sec
CVR	0.88	0.960	
Bank Width L/R	1.500/5.000	3.650/2.438	m
Free Board	0.500	0.500	m

(CH: 5.050 - 5.669 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.16/5.63	0.871/30.77	cum/cusec
Bed Slope	1 in 4200	1 in 4200	23.8 cm/km
Bed Width	1.500	2.670	m
F.S.D.	0.370	0.700	m
Velocity	0.26	0.416	m/sec
CVR	0.88	0.960	
Bank Width L/R	1.500/5.000	3.650/2.438	m
Free Board	0.500	0.500	m

(CH: 5.669 - 6.300 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.10/3.43	0.871/30.77	cum/cusec
Bed Slope	1 in 4200	1 in 4200	23.8 cm/km
Bed Width	1.250	2.670	m
F.S.D.	0.310	0.700	m
Velocity	0.23	0.416	m/sec
CVR	0.88	0.960	
Bank Width L/R	1.500/5.000	3.650/2.438	m
Free Board	0.500	0.500	m

| | | |

L- SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
FROM CH 6+000 TO 7+500

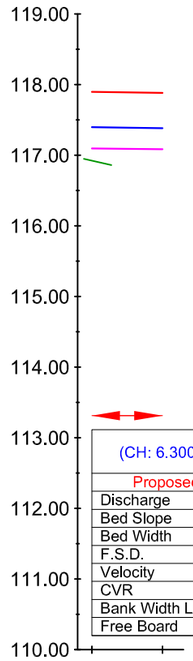


(CH: 5.669 - 6.300 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.10/3.43	0.871/30.77	cum/cusec
Bed Slope	1 in 4200	1 in 4200	23.8 cm/km
Bed Width	1.250	2.670	m
F.S.D.	0.310	0.700	m
Velocity	0.23	0.416	m/sec
CVR	0.88	0.960	
Bank Width L/R	1.500/5.000	3.650/2.438	m
Free Board	0.500	0.500	m

(CH: 6.300 - 7.550 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.07/2.45	0.871/30.77	cum/cusec
Bed Slope	1 in 4000	1 in 4200	25.0 cm/km
Bed Width	1.000	2.670	m
F.S.D.	0.300	0.700	m
Velocity	0.22	0.416	m/sec
CVR	0.87	0.960	
Bank Width L/R	1.500/5.000	3.650/2.438	m
Free Board	0.500	0.500	m

| | | |

L- SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
FROM CH 7+500 TO 7+550



(CH: 6.300 - 7.550 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.07/2.45	0.871/30.77	cum/cusec
Bed Slope	1 in 4000	1 in 4200	25.0 cm/km
Bed Width	1.000	2.670	m
F.S.D.	0.300	0.700	m
Velocity	0.22	0.416	m/sec
CVR	0.87	0.960	
Bank Width L/R	1.500/5.000	3.650/2.438	m
Free Board	0.500	0.500	m

DESIGN DATA	TOP OF BANK LEVEL	117.897	117.885
	F.S.L.	117.397	117.385
	Proposed Bed Level	117.097	117.085
EXISTING DATA	Bed Level		
	TOP OF BANK LEVEL		
	NSL	116.950	116.860
	Chainage IN KM	7+500	7+514	7+550

LEGEND

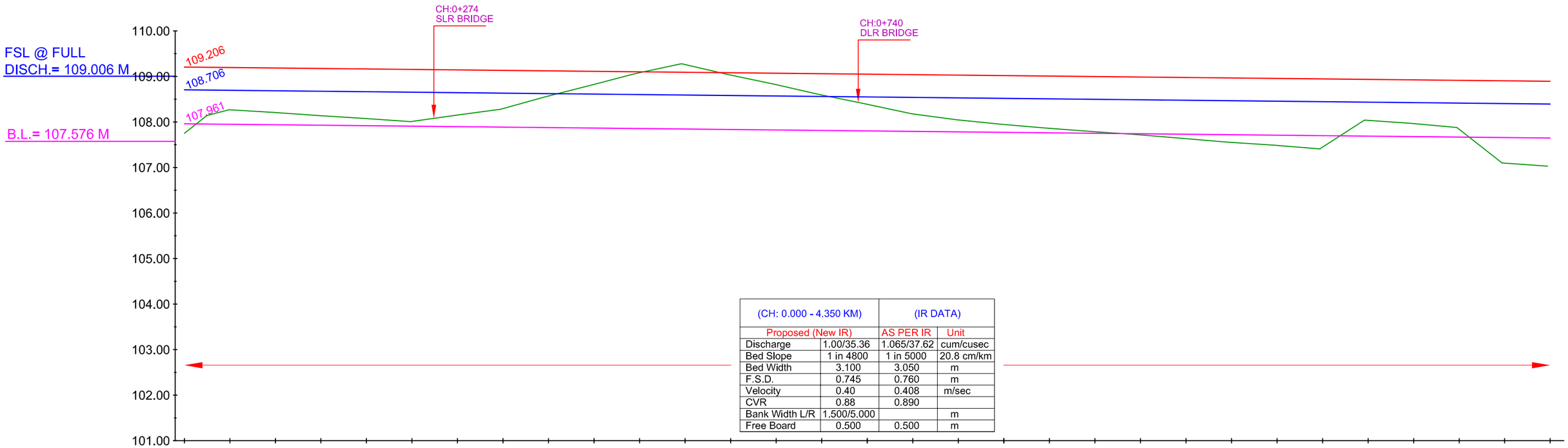
	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF KAILASHPUR SUB DY. (OFFTAKE FROM RD -9+050 KM., ANGRA BRANCH CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-04/ LSEC- 06 of 06

L- SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
FROM CH 0+000 TO 1+500

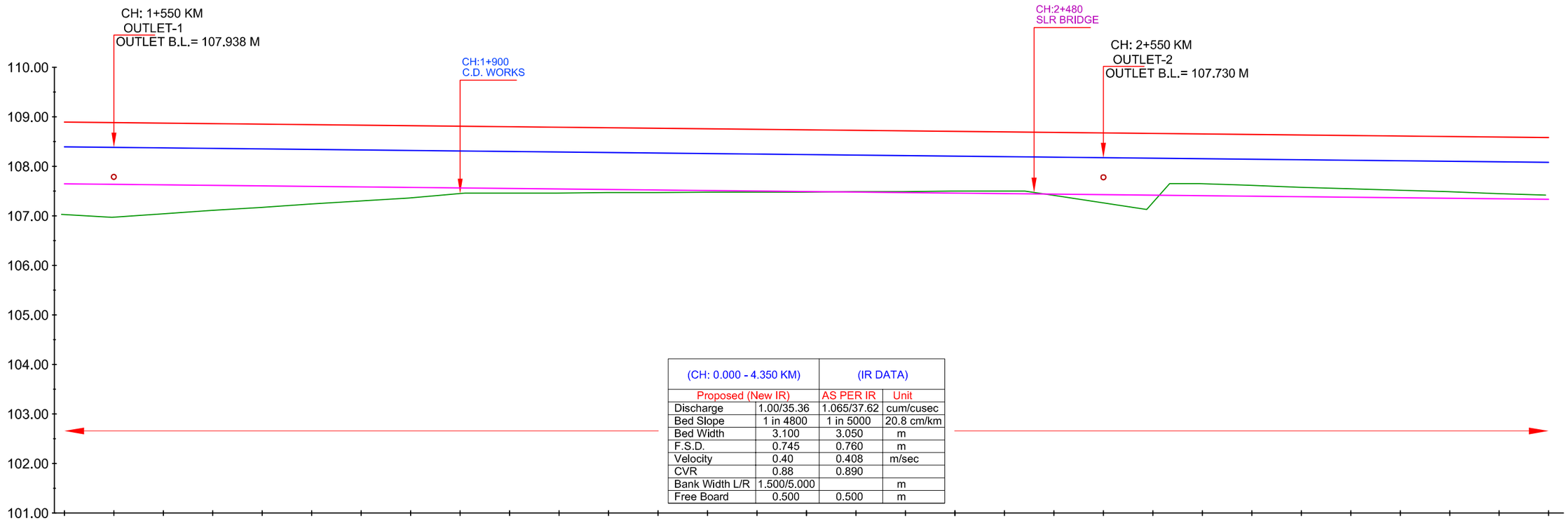
DATA OF PARENT CANAL



(CH: 0.000 - 4.350 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	1.00/35.36	1.065/37.62	cum/cusec
Bed Slope	1 in 4800	1 in 5000	20.8 cm/km
Bed Width	3.100	3.050	m
F.S.D.	0.745	0.760	m
Velocity	0.40	0.408	m/sec
CVR	0.88	0.890	
Bank Width L/R	1.500/5.000		m
Free Board	0.500	0.500	m

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L- SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
FROM CH 1+500 TO 3+000



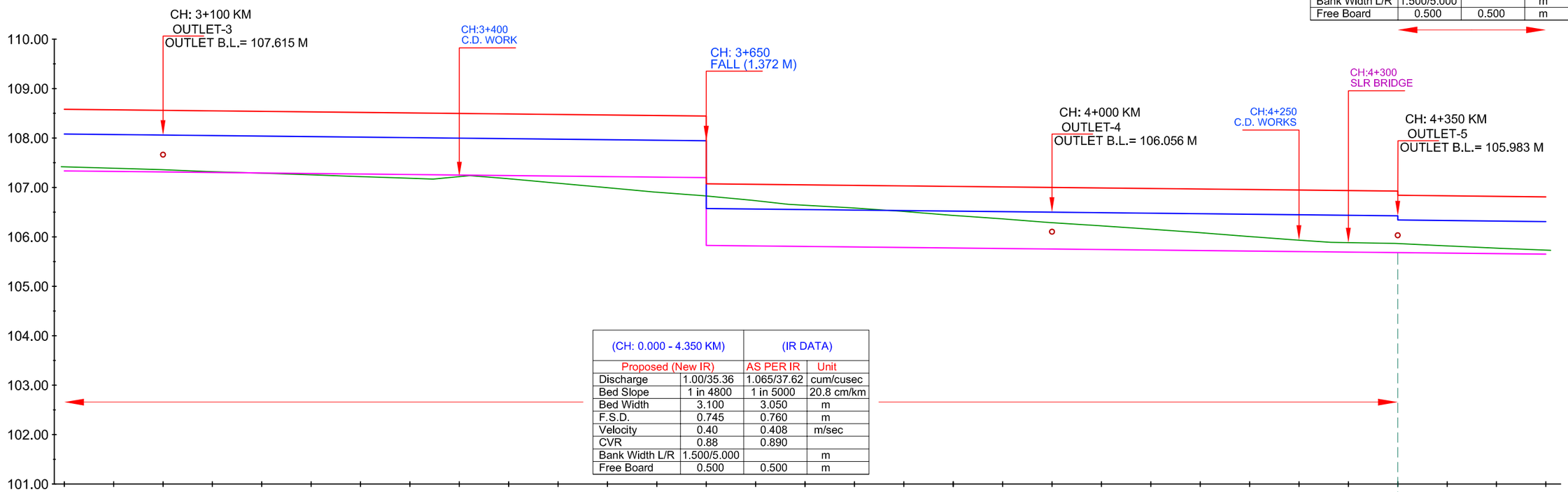
(CH: 0.000 - 4.350 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	1.00/35.36	1.065/37.62	cum/cusec
Bed Slope	1 in 4800	1 in 5000	20.8 cm/km
Bed Width	3.100	3.050	m
F.S.D.	0.745	0.760	m
Velocity	0.40	0.408	m/sec
CVR	0.88	0.890	
Bank Width L/R	1.500/5.000		m
Free Board	0.500	0.500	m

| | | |

L- SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
FROM CH 3+000 TO 4+500

(CH: 4.350 - 7.000 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.76/26.80	0.338/11.95	cum/cusec
Bed Slope	1 in 4800	1 in 5000	20.8 cm/km
Bed Width	2.780	1.830	m
F.S.D.	0.660	0.530	m
Velocity	0.37	0.303	m/sec
CVR	0.88	0.830	
Bank Width L/R	1.500/5.000		m
Free Board	0.500	0.500	m

(CH: 0.000 - 4.350 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	1.00/35.36	1.065/37.62	cum/cusec
Bed Slope	1 in 4800	1 in 5000	20.8 cm/km
Bed Width	3.100	3.050	m
F.S.D.	0.745	0.760	m
Velocity	0.40	0.408	m/sec
CVR	0.88	0.890	
Bank Width L/R	1.500/5.000		m
Free Board	0.500	0.500	m



		3+000	3+050	3+100	3+150	3+200	3+250	3+300	3+350	3+400	3+450	3+500	3+550	3+600	3+650	3+700	3+750	3+800	3+850	3+900	3+950	4+000	4+050	4+100	4+150	4+200	4+250	4+300	4+350	4+400	4+450	4+500
DESIGN DATA	TOP OF BANK LEVEL	108.581	108.571	108.560	108.550	108.539	108.529	108.518	108.508	108.498	108.487	108.477	108.466	108.456	108.446 107.074	107.063	107.053	107.042	107.032	107.021	107.011	107.001	106.990	106.980	106.969	106.959	106.949	106.938	106.928 106.843	106.832	106.822	106.811
	F.S.L.	108.081	108.071	108.060	108.050	108.039	108.029	108.018	108.008	107.998	107.987	107.977	107.966	107.956	107.946 106.574	106.563	106.553	106.542	106.532	106.521	106.511	106.501	106.490	106.480	106.469	106.459	106.449	106.438	106.428 106.343	106.332	106.322	106.311
	Proposed Bed Level	107.336	107.326	107.315	107.305	107.294	107.284	107.273	107.263	107.253	107.242	107.232	107.221	107.211	107.201 105.829	105.819	105.808	105.798	105.787	105.777	105.766	105.756	105.746	105.735	105.725	105.714	105.704	105.694	105.683 105.683	105.673	105.662	105.652
EXISTING DATA	Bed Level																															
	TOP OF BANK LEVEL																															
	NSL	107.420	107.390	107.360	107.320	107.290	107.260	107.220	107.190	107.170	107.240	107.180	107.090	107.000	106.910	106.830	106.740	106.660		106.590	106.520	106.440	106.370	106.290	106.230	106.160	106.090	106.020	105.940	105.890	105.870	105.820	105.770	105.730
	Chainage IN KM	3+000	3+050	3+100	3+150	3+200	3+250	3+300	3+350	3+400	3+450	3+500	3+550	3+600	3+650	3+700	3+750	3+800	3+850	3+900	3+950	4+000	4+050	4+100	4+150	4+200	4+250	4+300	4+350	4+400	4+450	4+500

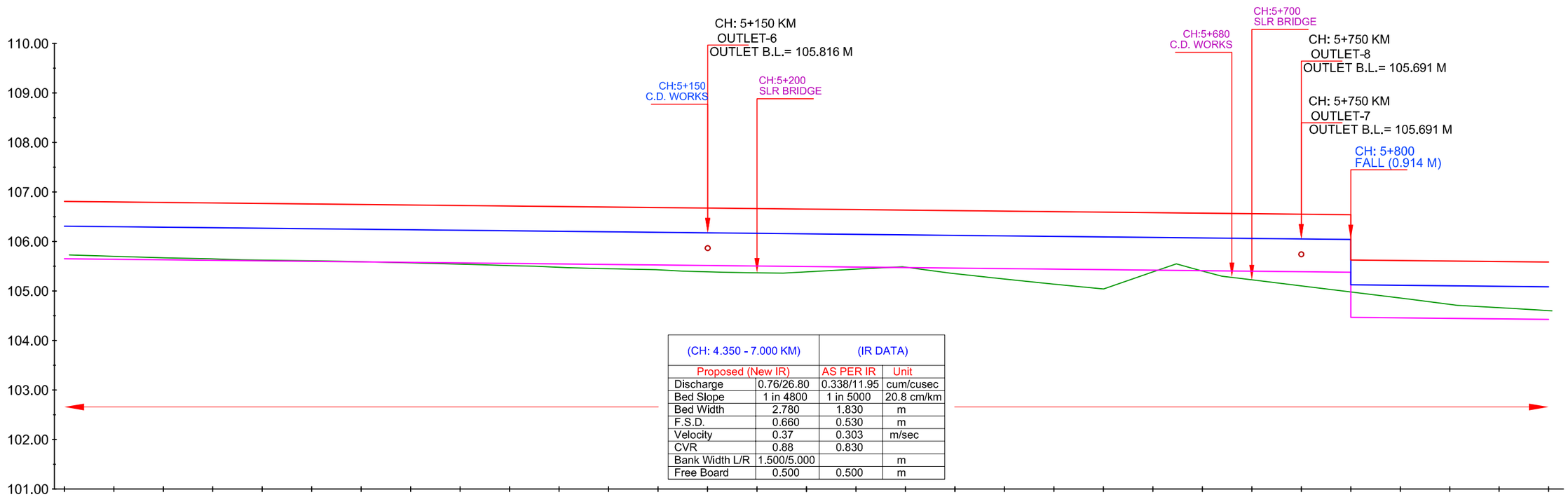
LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ LSEC- 03 of 09

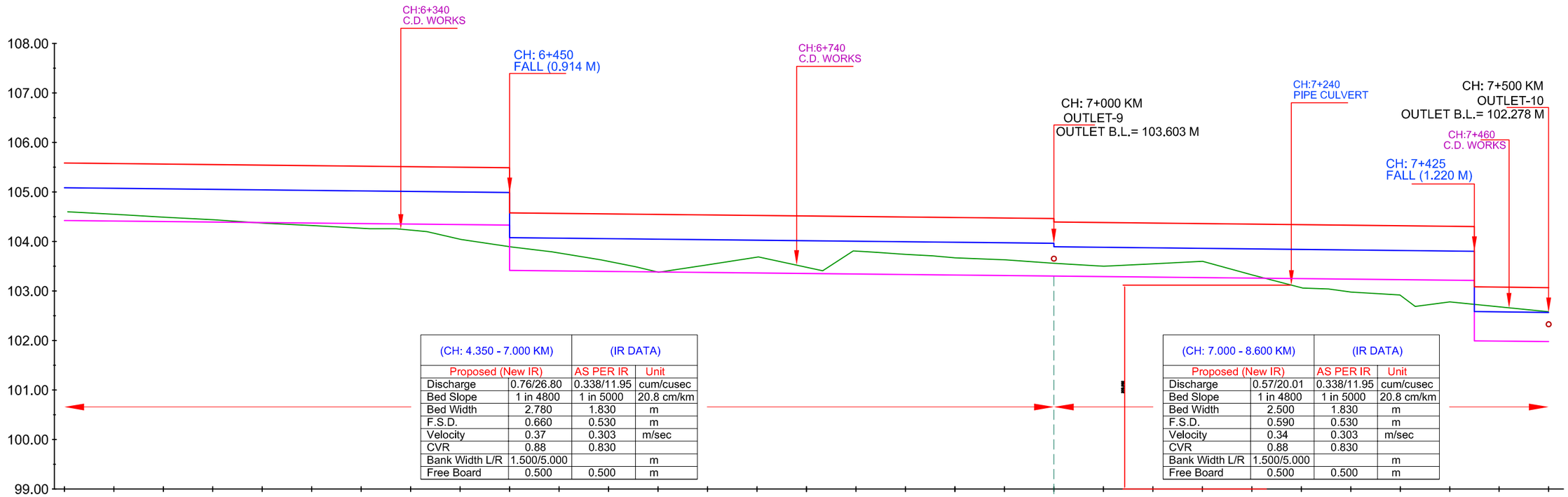
L- SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
FROM CH 4+500 TO 6+000



(CH: 4.350 - 7.000 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.76/26.80	0.338/11.95	cum/cusec
Bed Slope	1 in 4800	1 in 5000	20.8 cm/km
Bed Width	2.780	1.830	m
F.S.D.	0.660	0.530	m
Velocity	0.37	0.303	m/sec
CVR	0.88	0.830	
Bank Width L/R	1.500/5.000		m
Free Board	0.500	0.500	m

| | | |

L- SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
FROM CH 6+000 TO 7+500

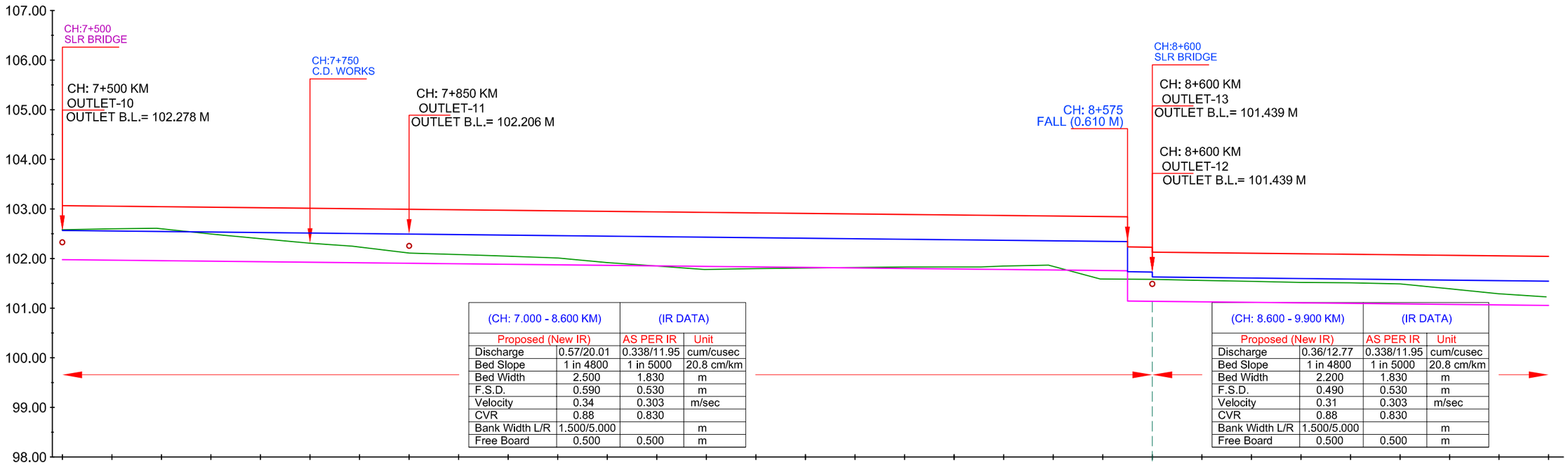


(CH: 4.350 - 7.000 KM)	(IR DATA)	
Proposed (New IR)	AS PER IR	Unit
Discharge	0.76/26.80	0.338/11.95	cum/cusec
Bed Slope	1 in 4800	1 in 5000	20.8 cm/km
Bed Width	2.780	1.830	m
F.S.D.	0.660	0.530	m
Velocity	0.37	0.303	m/sec
CVR	0.88	0.830	
Bank Width L/R	1.500/5.000		m
Free Board	0.500	0.500	m

(CH: 7.000 - 8.600 KM)	(IR DATA)	
Proposed (New IR)	AS PER IR	Unit
Discharge	0.57/20.01	0.338/11.95	cum/cusec
Bed Slope	1 in 4800	1 in 5000	20.8 cm/km
Bed Width	2.500	1.830	m
F.S.D.	0.590	0.530	m
Velocity	0.34	0.303	m/sec
CVR	0.88	0.830	
Bank Width L/R	1.500/5.000		m
Free Board	0.500	0.500	m

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L- SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
FROM CH 7+500 TO 9+000

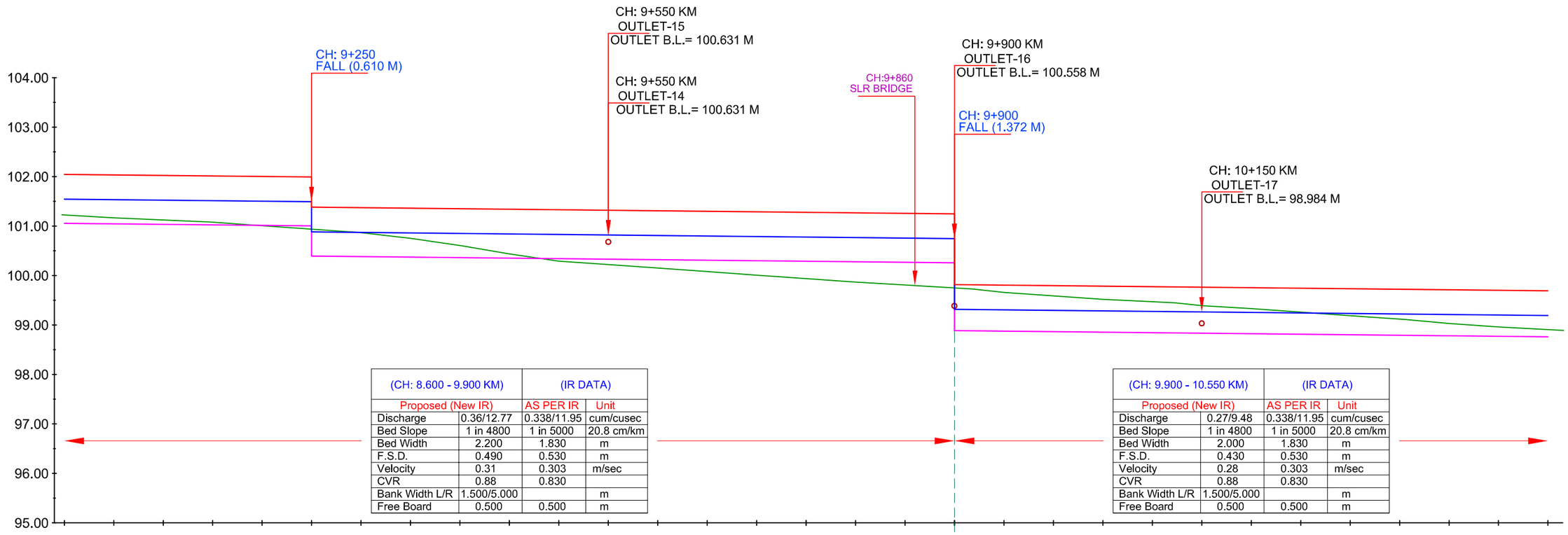


(CH: 7.000 - 8.600 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.57/20.01	0.338/11.95	cum/cusec
Bed Slope	1 in 4800	1 in 5000	20.8 cm/km
Bed Width	2.500	1.830	m
F.S.D.	0.590	0.530	m
Velocity	0.34	0.303	m/sec
CVR	0.88	0.830	
Bank Width L/R	1.500/5.000		m
Free Board	0.500	0.500	m

(CH: 8.600 - 9.900 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.36/12.77	0.338/11.95	cum/cusec
Bed Slope	1 in 4800	1 in 5000	20.8 cm/km
Bed Width	2.200	1.830	m
F.S.D.	0.490	0.530	m
Velocity	0.31	0.303	m/sec
CVR	0.88	0.830	
Bank Width L/R	1.500/5.000		m
Free Board	0.500	0.500	m

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L- SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
FROM CH 9+000 TO 10+500

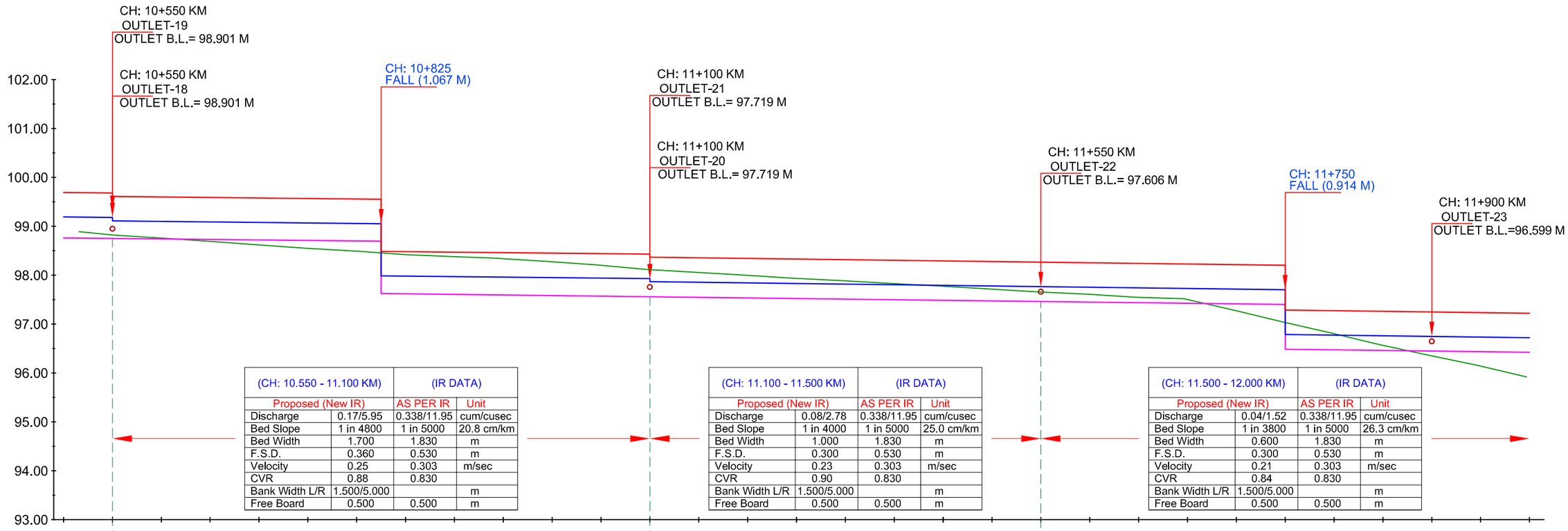


(CH: 8.600 - 9.900 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.36/12.77	0.338/11.95	cum/cusec
Bed Slope	1 in 4800	1 in 5000	20.8 cm/km
Bed Width	2.200	1.830	m
F.S.D.	0.490	0.530	m
Velocity	0.31	0.303	m/sec
CVR	0.88	0.830	
Bank Width L/R	1.500/5.000		m
Free Board	0.500	0.500	m

(CH: 9.900 - 10.550 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.27/9.48	0.338/11.95	cum/cusec
Bed Slope	1 in 4800	1 in 5000	20.8 cm/km
Bed Width	2.000	1.830	m
F.S.D.	0.430	0.530	m
Velocity	0.28	0.303	m/sec
CVR	0.88	0.830	
Bank Width L/R	1.500/5.000		m
Free Board	0.500	0.500	m

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L- SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
FROM CH 10+500 TO 12+000



(CH: 10.550 - 11.100 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.17/5.95	0.338/11.95	cum/cusec
Bed Slope	1 in 4800	1 in 5000	20.8 cm/km
Bed Width	1.700	1.830	m
F.S.D.	0.360	0.530	m
Velocity	0.25	0.303	m/sec
CVR	0.88	0.830	
Bank Width L/R	1.500/5.000		m
Free Board	0.500	0.500	m

(CH: 11.100 - 11.500 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.08/2.78	0.338/11.95	cum/cusec
Bed Slope	1 in 4000	1 in 5000	25.0 cm/km
Bed Width	1.000	1.830	m
F.S.D.	0.300	0.530	m
Velocity	0.23	0.303	m/sec
CVR	0.90	0.830	
Bank Width L/R	1.500/5.000		m
Free Board	0.500	0.500	m

(CH: 11.500 - 12.000 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.04/1.52	0.338/11.95	cum/cusec
Bed Slope	1 in 3800	1 in 5000	26.3 cm/km
Bed Width	0.600	1.830	m
F.S.D.	0.300	0.530	m
Velocity	0.21	0.303	m/sec
CVR	0.84	0.830	
Bank Width L/R	1.500/5.000		m
Free Board	0.500	0.500	m

		10+500	10+550	10+600	10+650	10+700	10+750	10+800	10+850	10+900	10+950	11+000	11+050	11+100	11+150	11+200	11+250	11+300	11+350	11+400	11+450	11+500	11+550	11+600	11+650	11+700	11+750	11+800	11+850	11+900	11+950	12+000
DESIGN DATA	TOP OF BANK LEVEL	99.691	99.681 99.611	99.601	99.590	99.580	99.569	99.559	99.554 98.487	98.482	98.471	98.461	98.450	98.440	98.429 98.369	98.357	98.344	98.332	98.319	98.307	98.294	98.282	98.269 98.269	98.256	98.243	98.230	98.217	98.204 97.289	97.276	97.262	97.249	97.236	97.223
	F.S.L.	99.191	99.181 99.111	99.101	99.090	99.080	99.069	99.059	99.054 97.987	97.982	97.971	97.961	97.950	97.940	97.929 97.869	97.857	97.844	97.832	97.819	97.807	97.794	97.782	97.769 97.769	97.756	97.743	97.730	97.717	97.704 96.789	96.776	96.762	96.749	96.736	96.723
	Proposed Bed Level	98.761	98.751 98.751	98.741	98.730	98.720	98.709	98.699	98.694 97.627	97.622	97.611	97.601	97.590	97.580	97.570 97.570	97.557	97.544	97.532	97.519	97.507	97.494	97.482	97.469 97.469	97.456	97.443	97.430	97.417	97.404 96.489	96.476	96.462	96.449	96.436	96.423
EXISTING DATA	Bed Level																															
	TOP OF BANK LEVEL																															
	NSL	98.890	98.820	98.760	98.690	98.620	98.550	98.490	98.420	98.380	98.350	98.280	98.210	98.120	98.060	98.010	97.940	97.890	97.830	97.780	97.720	97.660	97.610	97.550	97.520	97.290	97.050	96.820	96.580	96.370	96.160	95.920
	Chainage IN KM	10+500	10+550	10+600	10+650	10+700	10+750	10+800	10+850	10+900	10+950	11+000	11+050	11+100	11+150	11+200	11+250	11+300	11+350	11+400	11+450	11+500	11+550	11+600	11+650	11+700	11+750	11+800	11+850	11+900	11+950	12+000

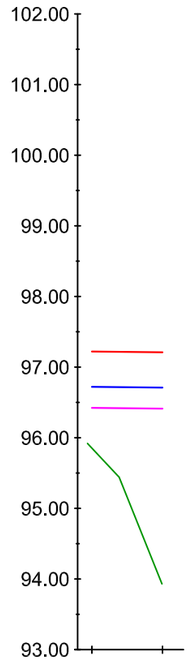
LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ LSEC- 08 of 09

L- SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
FROM CH 12+000 TO 12+050



DESIGN DATA	TOP OF BANK LEVEL	97.223
	F.S.L.	96.723
	Proposed Bed Level	96.423
EXISTING DATA	Bed Level	
	TOP OF BANK LEVEL	
	NSL	95.920 / 95.440 / 93.930
	Chainage IN KM	12+000 / 12+050

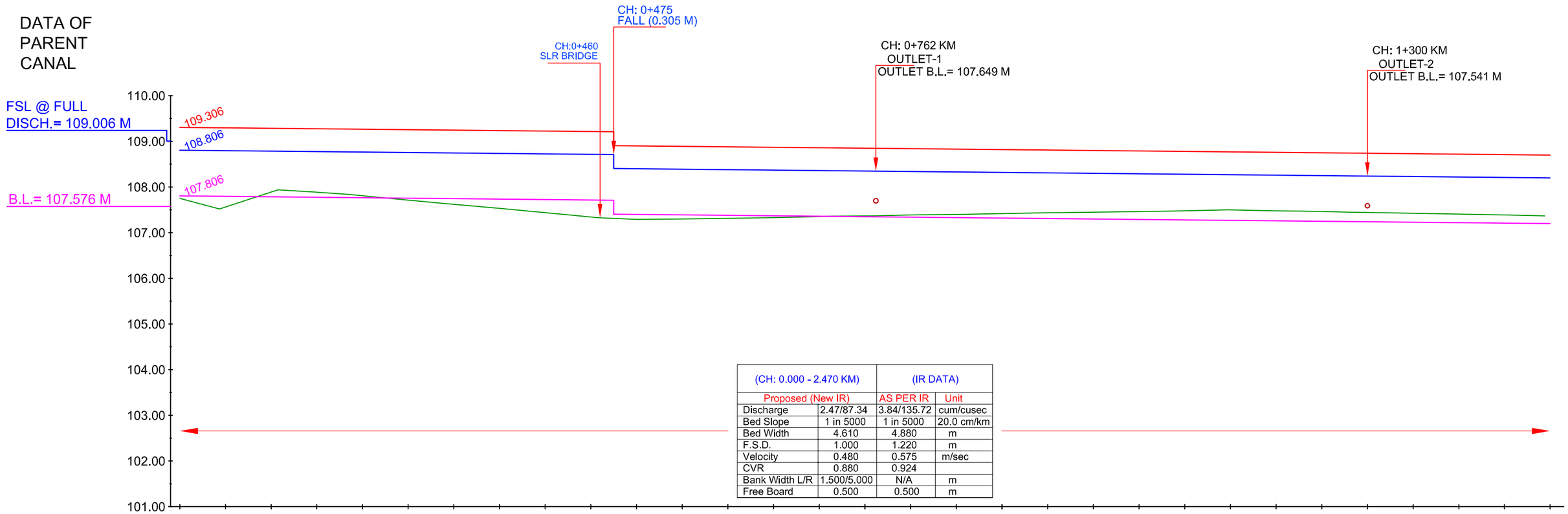
LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ LSEC- 09 of 09

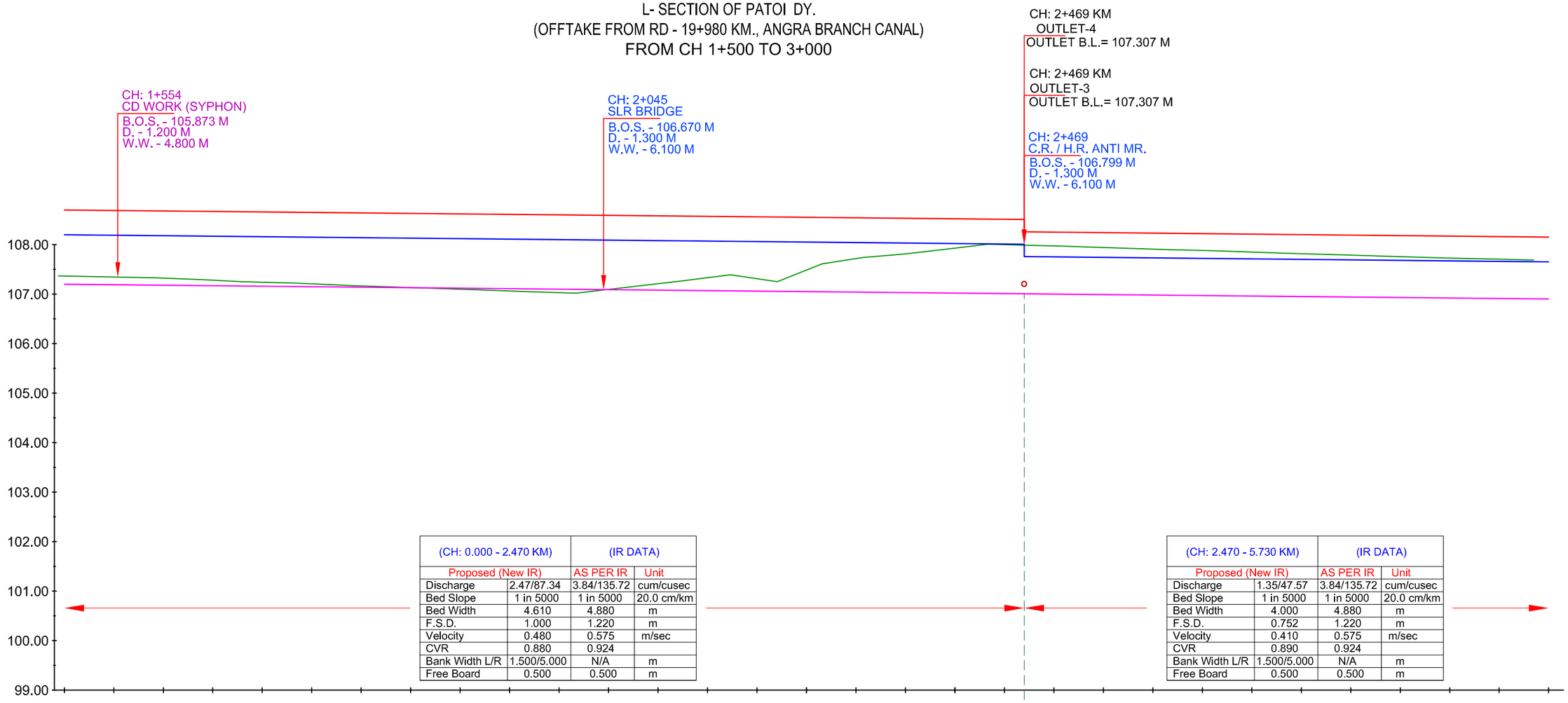
L- SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
FROM CH 0+000 TO 1+500



(CH: 0.000 - 2.470 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	2.47/87.34	3.84/135.72	cum/cusec
Bed Slope	1 in 5000	1 in 5000	20.0 cm/km
Bed Width	4.610	4.880	m
F.S.D.	1.000	1.220	m
Velocity	0.480	0.575	m/sec
CVR	0.880	0.924	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	0.500	m

| | | |

L- SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
FROM CH 1+500 TO 3+000

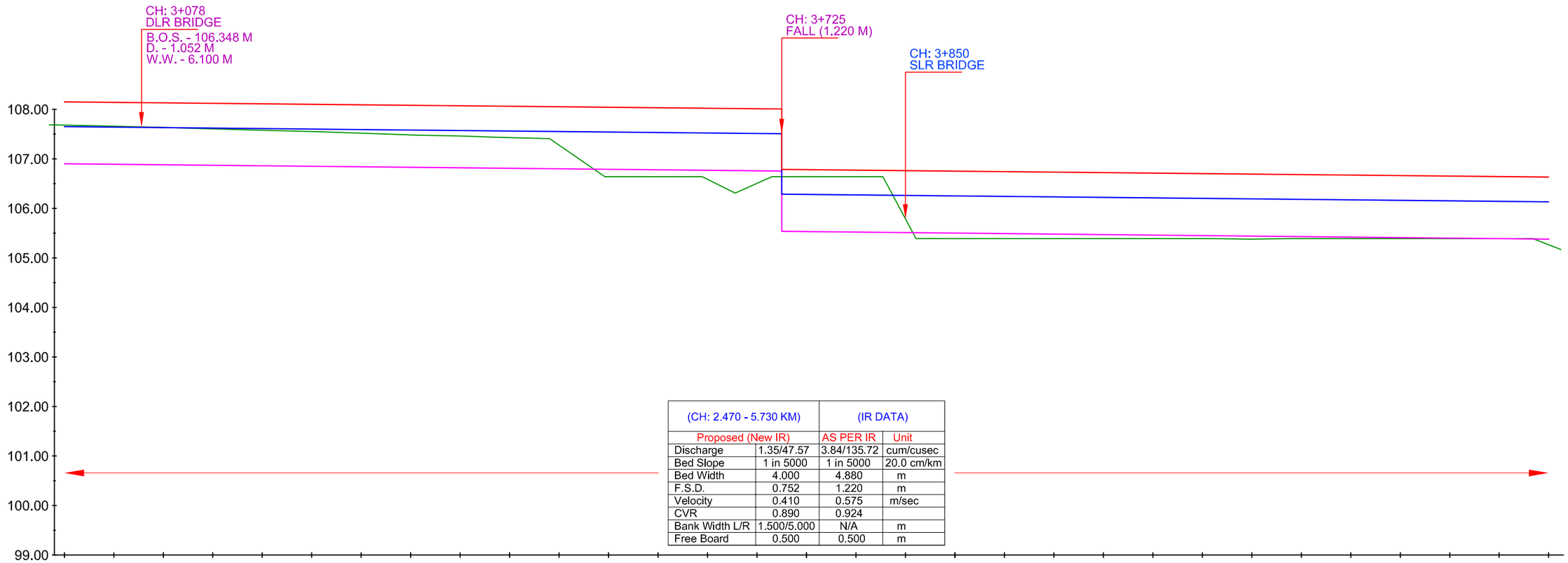


(CH: 0.000 - 2.470 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	2.47/87.34	3.84/135.72	cum/cusec
Bed Slope	1 in 5000	1 in 5000	20.0 cm/km
Bed Width	4.610	4.880	m
F.S.D.	1.000	1.220	m
Velocity	0.480	0.575	m/sec
CVR	0.880	0.924	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	0.500	m

(CH: 2.470 - 5.730 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	1.35/47.57	3.84/135.72	cum/cusec
Bed Slope	1 in 5000	1 in 5000	20.0 cm/km
Bed Width	4.000	4.880	m
F.S.D.	0.752	1.220	m
Velocity	0.410	0.575	m/sec
CVR	0.890	0.924	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	0.500	m

| | | |

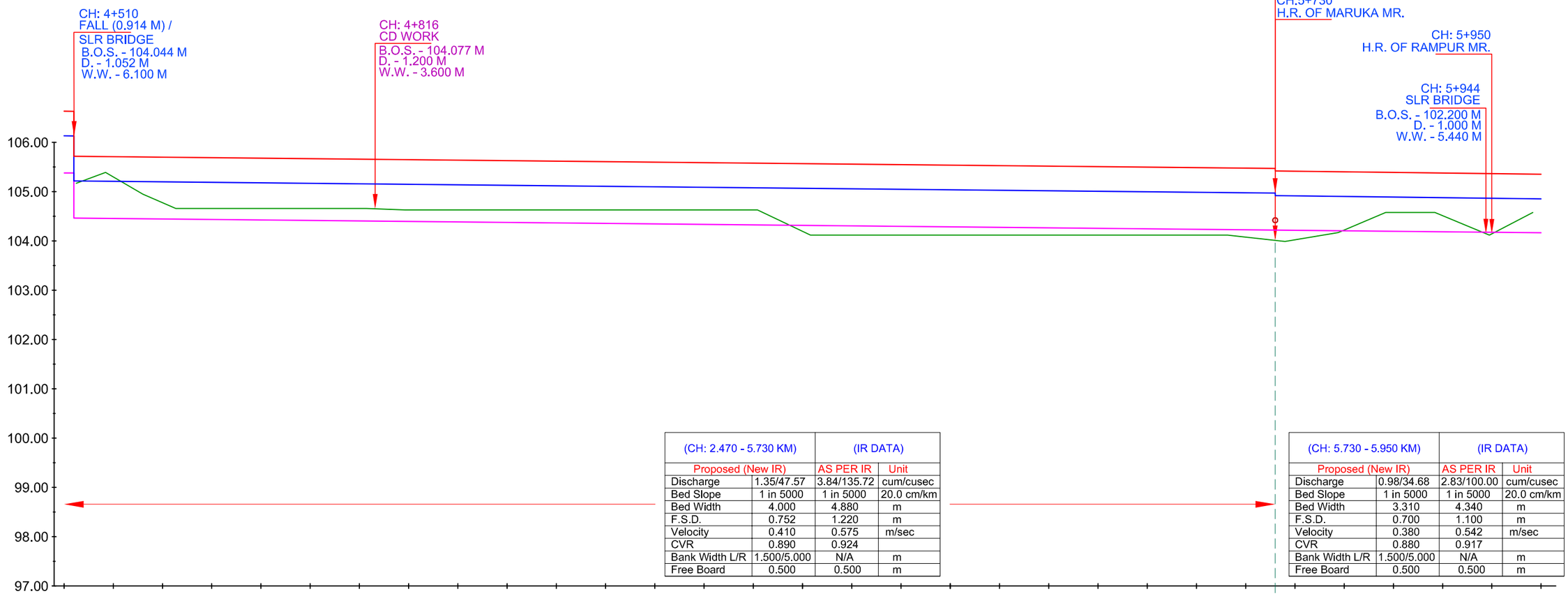
L- SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
FROM CH 3+000 TO 4+500



(CH: 2.470 - 5.730 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	1.35/47.57	3.84/135.72	cum/cusec
Bed Slope	1 in 5000	1 in 5000	20.0 cm/km
Bed Width	4.000	4.880	m
F.S.D.	0.752	1.220	m
Velocity	0.410	0.575	m/sec
CVR	0.890	0.924	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	0.500	m

| | | |

L- SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
FROM CH 4+500 TO 6+000



(CH: 2.470 - 5.730 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	1.35/47.57	3.84/135.72	cum/cusec
Bed Slope	1 in 5000	1 in 5000	20.0 cm/km
Bed Width	4.000	4.880	m
F.S.D.	0.752	1.220	m
Velocity	0.410	0.575	m/sec
CVR	0.890	0.924	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	0.500	m

(CH: 5.730 - 5.950 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.98/34.68	2.83/100.00	cum/cusec
Bed Slope	1 in 5000	1 in 5000	20.0 cm/km
Bed Width	3.310	4.340	m
F.S.D.	0.700	1.100	m
Velocity	0.380	0.542	m/sec
CVR	0.880	0.917	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	0.500	m

		Chainage IN KM	TOP OF BANK LEVEL	F.S.L.	Proposed Bed Level	Bed Level	TOP OF BANK LEVEL	NSL
DESIGN DATA	EXISTING DATA	4+500	106.633	106.133	105.381			105.170
		4+550	106.631	106.131	105.379			105.390
		4+600	105.717	105.217	104.465			104.950
		4+650	105.709	105.209	104.457			104.660
		4+700	105.699	105.199	104.447			104.660
		4+750	105.689	105.189	104.437			104.660
		4+800	105.679	105.179	104.427			104.660
		4+850	105.669	105.169	104.417			104.660
		4+900	105.659	105.159	104.407			104.630
		4+950	105.649	105.149	104.397			104.630
		5+000	105.639	105.139	104.387			104.630
		5+050	105.629	105.129	104.377			104.630
		5+100	105.619	105.119	104.367			104.630
		5+150	105.609	105.109	104.357			104.630
		5+200	105.599	105.099	104.347			104.630
		5+250	105.589	105.089	104.337			104.630
		5+300	105.579	105.079	104.327			104.630
		5+350	105.569	105.069	104.317			104.120
		5+400	105.559	105.059	104.307			104.120
		5+450	105.549	105.049	104.297			104.120
		5+500	105.539	105.039	104.287			104.120
		5+550	105.529	105.029	104.277			104.120
		5+600	105.519	105.019	104.267			104.120
		5+650	105.509	105.009	104.257			104.120
		5+700	105.499	104.999	104.247			104.120
		5+730	105.489	104.989	104.237			104.120
		5+750	105.479	104.979	104.227			104.120
		5+800	105.473 / 105.421	104.973 / 104.921	104.221 / 104.217			104.010 / 103.990
		5+850	105.417	104.917	104.217			104.170
		5+900	105.407	104.907	104.207			104.580
		5+950	105.397	104.897	104.197			104.580
		6+000	105.387	104.887	104.187			104.120
			105.377 / 105.317	104.877 / 104.817	104.177			104.580
			105.307	104.807	104.167			

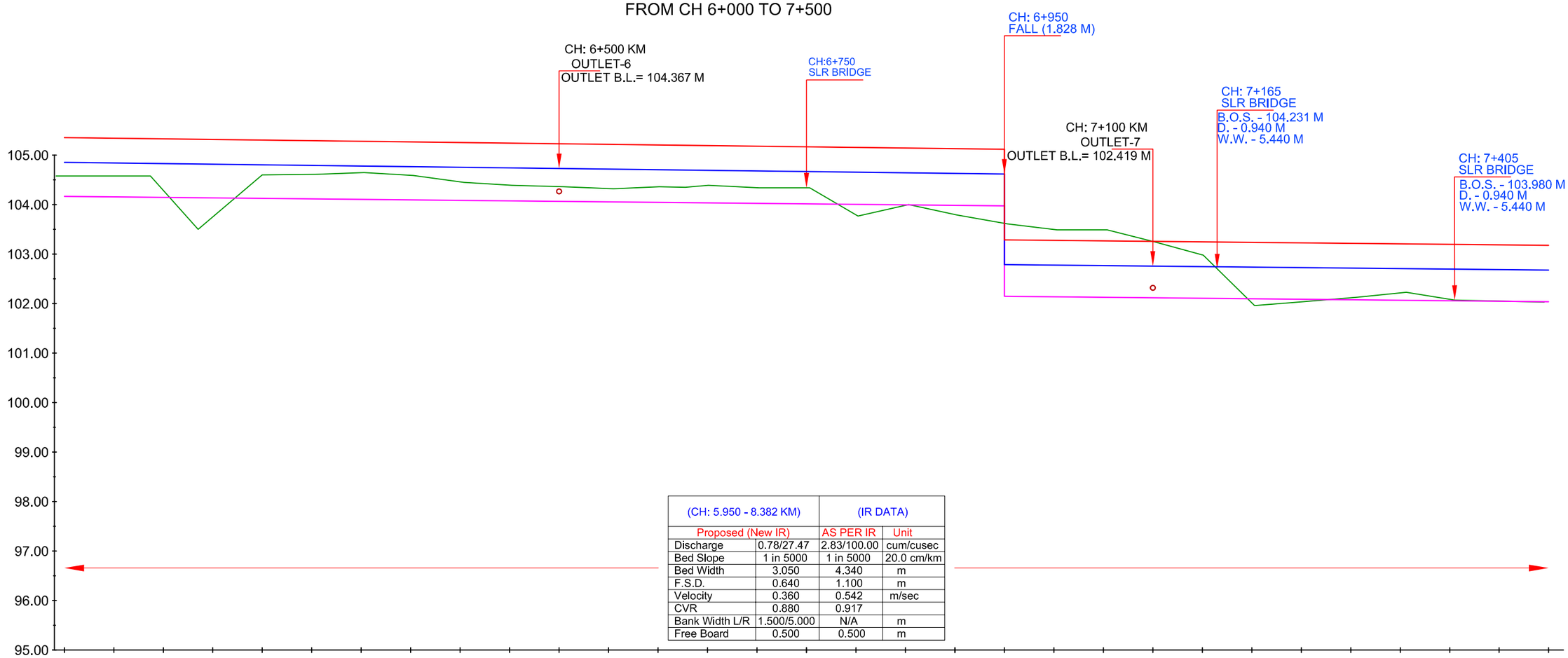
LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ LSEC- 04 of 11

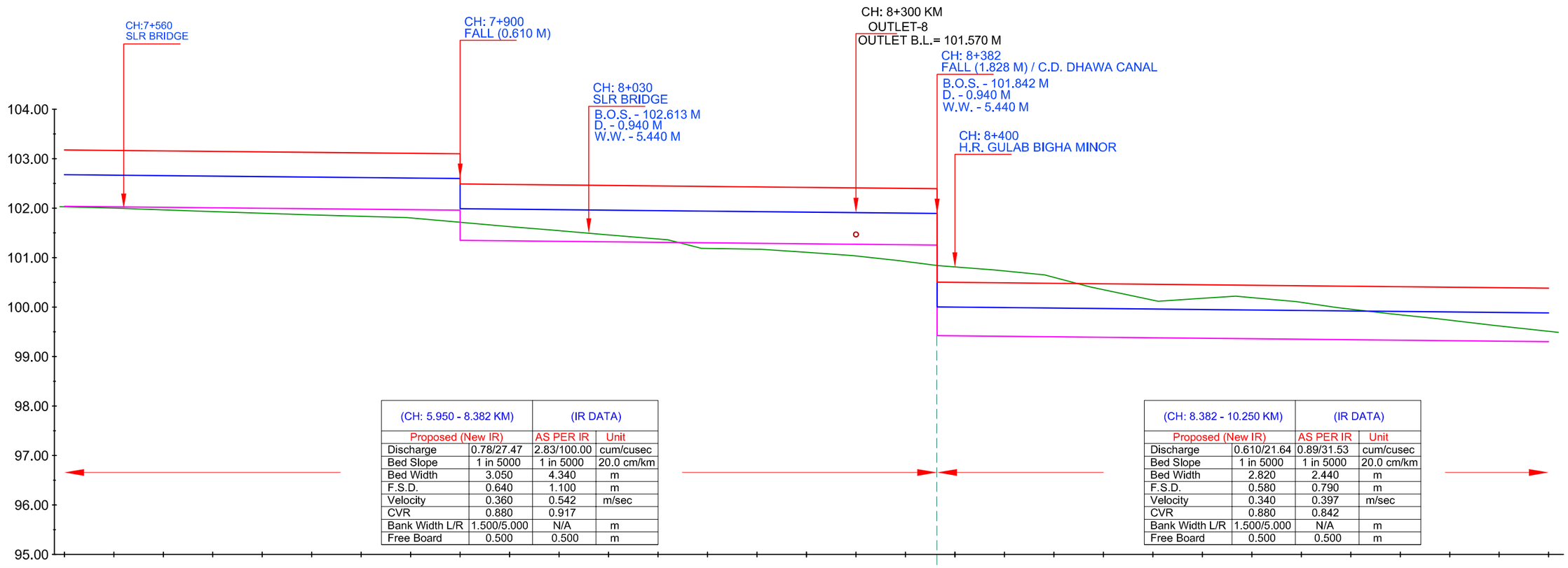
L- SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
FROM CH 6+000 TO 7+500



(CH: 5.950 - 8.382 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.78/27.47	2.83/100.00	cum/cusec
Bed Slope	1 in 5000	1 in 5000	20.0 cm/km
Bed Width	3.050	4.340	m
F.S.D.	0.640	1.100	m
Velocity	0.360	0.542	m/sec
CVR	0.880	0.917	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	0.500	m

| | | |

L- SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
FROM CH 7+500 TO 9+000



(CH: 5.950 - 8.382 KM)	(IR DATA)		
Proposed (New IR)		AS PER IR	Unit
Discharge	0.78/27.47	2.83/100.00	cum/cusec
Bed Slope	1 in 5000	1 in 5000	20.0 cm/km
Bed Width	3.050	4.340	m
F.S.D.	0.640	1.100	m
Velocity	0.360	0.542	m/sec
CVR	0.880	0.917	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	0.500	m

(CH: 8.382 - 10.250 KM)	(IR DATA)		
Proposed (New IR)		AS PER IR	Unit
Discharge	0.610/21.64	0.89/31.53	cum/cusec
Bed Slope	1 in 5000	1 in 5000	20.0 cm/km
Bed Width	2.820	2.440	m
F.S.D.	0.580	0.790	m
Velocity	0.340	0.397	m/sec
CVR	0.880	0.842	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	0.500	m

DESIGN DATA	TOP OF BANK LEVEL	103.179	103.169	103.159	103.149	103.139	103.129	103.119	103.109	103.099 102.490	102.480	102.470	102.460	102.450	102.440	102.430	102.420	102.410	102.400	102.393 100.505	100.502	100.492	100.482	100.472	100.462	100.452	100.442	100.432	100.422	100.412	100.402	100.392	100.382
	F.S.L.	102.679	102.669	102.659	102.649	102.639	102.629	102.619	102.609	102.599 101.990	101.980	101.970	101.960	101.950	101.940	101.930	101.920	101.910	101.900	101.893 100.005	100.002	99.992	99.982	99.972	99.962	99.952	99.942	99.932	99.922	99.912	99.902	99.892	99.882
	Proposed Bed Level	102.039	102.029	102.019	102.009	101.999	101.989	101.979	101.969	101.959 101.350	101.340	101.330	101.320	101.310	101.300	101.290	101.280	101.270	101.260	101.253 99.425	99.422	99.412	99.402	99.392	99.382	99.372	99.362	99.352	99.342	99.332	99.322	99.312	99.302
EXISTING DATA	Bed Level																																
	TOP OF BANK LEVEL																																
	NSL	102.030	102.000	101.970	101.940	101.900	101.870	101.840	101.810	101.720	101.630	101.560	101.460	101.360	101.190	101.170	101.110	101.040	100.940	100.840	100.750	100.650	100.410	100.120	100.180	100.220	100.110	99.990	99.870	99.770	99.630	99.490	
Chainage IN KM		7+500	7+550	7+600	7+650	7+700	7+750	7+800	7+850	7+900	7+950	8+000	8+050	8+100	8+150	8+200	8+250	8+300	8+350	8+382	8+400	8+450	8+500	8+550	8+600	8+650	8+700	8+750	8+800	8+850	8+900	8+950	9+000

LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

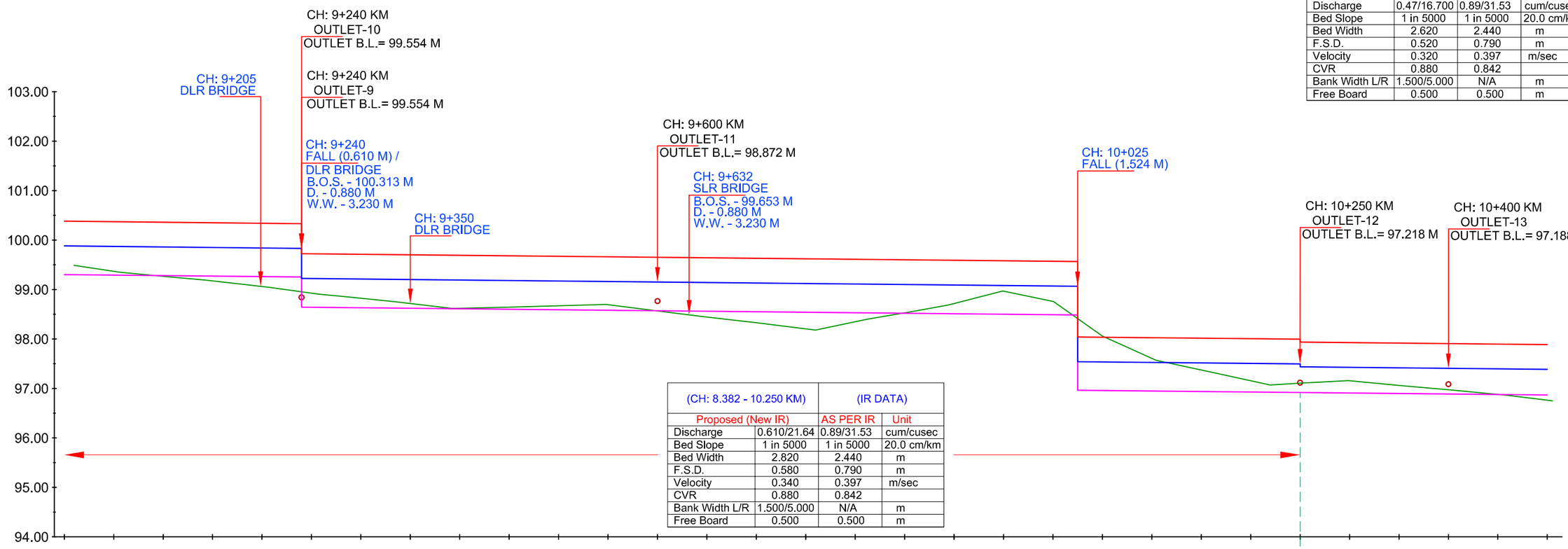
IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ LSEC- 06 of 11

L- SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
FROM CH 9+000 TO 10+500

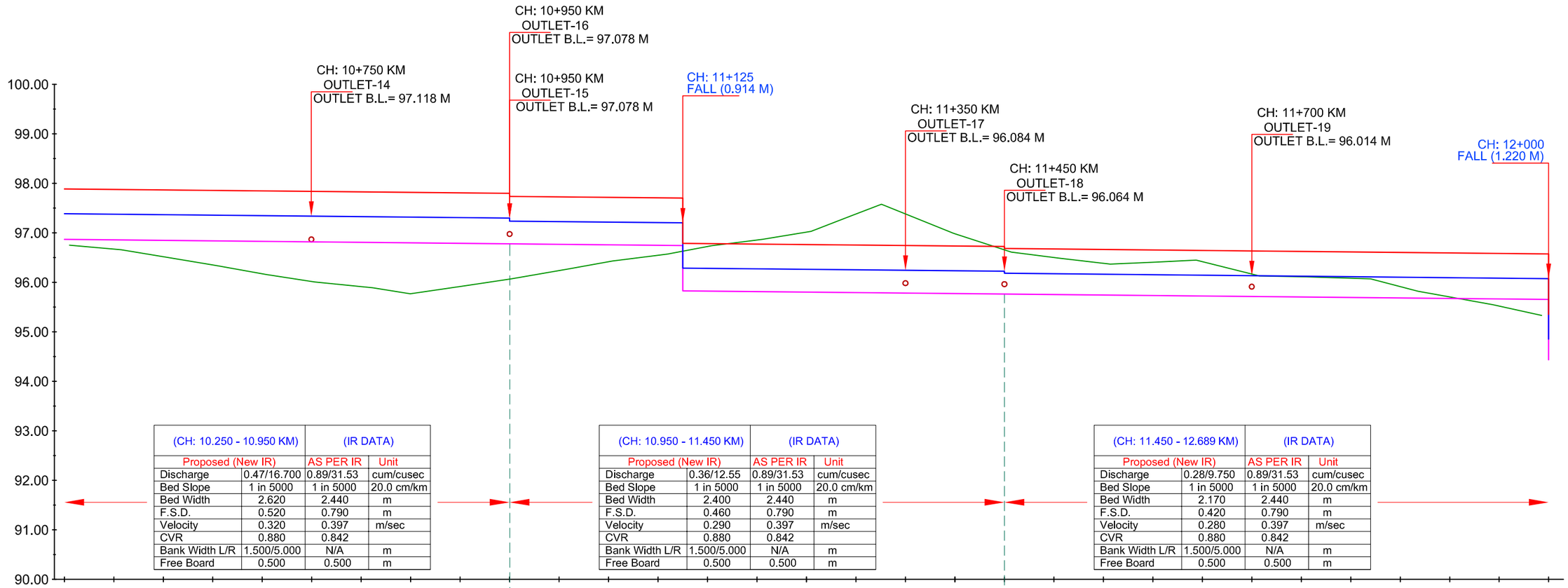
(CH: 10.250 - 10.950 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.47/16.700	0.89/31.53	cum/cusec
Bed Slope	1 in 5000	1 in 5000	20.0 cm/km
Bed Width	2.620	2.440	m
F.S.D.	0.520	0.790	m
Velocity	0.320	0.397	m/sec
CVR	0.880	0.842	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	0.500	m

(CH: 8.382 - 10.250 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.610/21.64	0.89/31.53	cum/cusec
Bed Slope	1 in 5000	1 in 5000	20.0 cm/km
Bed Width	2.820	2.440	m
F.S.D.	0.580	0.790	m
Velocity	0.340	0.397	m/sec
CVR	0.880	0.842	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	0.500	m



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L- SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
FROM CH 10+500 TO 12+000



(CH: 10.250 - 10.950 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.47/16.700	0.89/31.53	cum/cusec
Bed Slope	1 in 5000	1 in 5000	20.0 cm/km
Bed Width	2.620	2.440	m
F.S.D.	0.520	0.790	m
Velocity	0.320	0.397	m/sec
CVR	0.880	0.842	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	0.500	m

(CH: 10.950 - 11.450 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.36/12.55	0.89/31.53	cum/cusec
Bed Slope	1 in 5000	1 in 5000	20.0 cm/km
Bed Width	2.400	2.440	m
F.S.D.	0.460	0.790	m
Velocity	0.290	0.397	m/sec
CVR	0.880	0.842	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	0.500	m

(CH: 11.450 - 12.689 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.28/9.750	0.89/31.53	cum/cusec
Bed Slope	1 in 5000	1 in 5000	20.0 cm/km
Bed Width	2.170	2.440	m
F.S.D.	0.420	0.790	m
Velocity	0.280	0.397	m/sec
CVR	0.880	0.842	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	0.500	m

		Chainage IN KM	10+500	10+550	10+600	10+650	10+700	10+750	10+800	10+850	10+900	10+950	11+000	11+050	11+100	11+150	11+200	11+250	11+300	11+350	11+400	11+450	11+500	11+550	11+600	11+650	11+700	11+750	11+800	11+850	11+900	11+950	12+000
DESIGN DATA	TOP OF BANK LEVEL		97.888	97.878	97.868	97.858	97.848	97.838		97.818	97.808	97.798 97.738	97.728	97.718	97.708	97.703 96.789 96.784	96.774	96.764	96.754	96.744	96.734	96.724 96.684	96.674	96.664	96.654	96.644	96.634	96.624	96.614	96.604	96.594	96.584	96.574 95.354
	F.S.L.		97.388	97.378	97.368	97.358	97.348	97.338		97.318	97.308	97.298 97.238	97.228	97.218	97.208	97.203 96.289 96.284	96.274	96.264	96.254	96.244	96.234	96.224 96.184	96.174	96.164	96.154	96.144	96.134	96.124	96.114	96.104	96.094	96.084	96.074 94.854
	Proposed Bed Level		96.868	96.858	96.848	96.838	96.828	96.818		96.798	96.788	96.778 96.778	96.768	96.758	96.748	96.743 95.829 95.824	95.814	95.804	95.794	95.784	95.774	95.764 95.764	95.754	95.744	95.734	95.724	95.714	95.704	95.694	95.684	95.674	95.664	95.654 94.434
EXISTING DATA	Bed Level																																
	TOP OF BANK LEVEL																																
	NSL		96.750	96.660	96.500	96.340	96.160	96.010	95.890	95.770	95.940	96.070	96.270	96.430	96.570	96.740	96.870	97.030	97.340	97.580	96.990	96.610	96.490	96.370	96.410	96.450	96.130	96.110	96.070	95.820	95.680	95.550	95.330

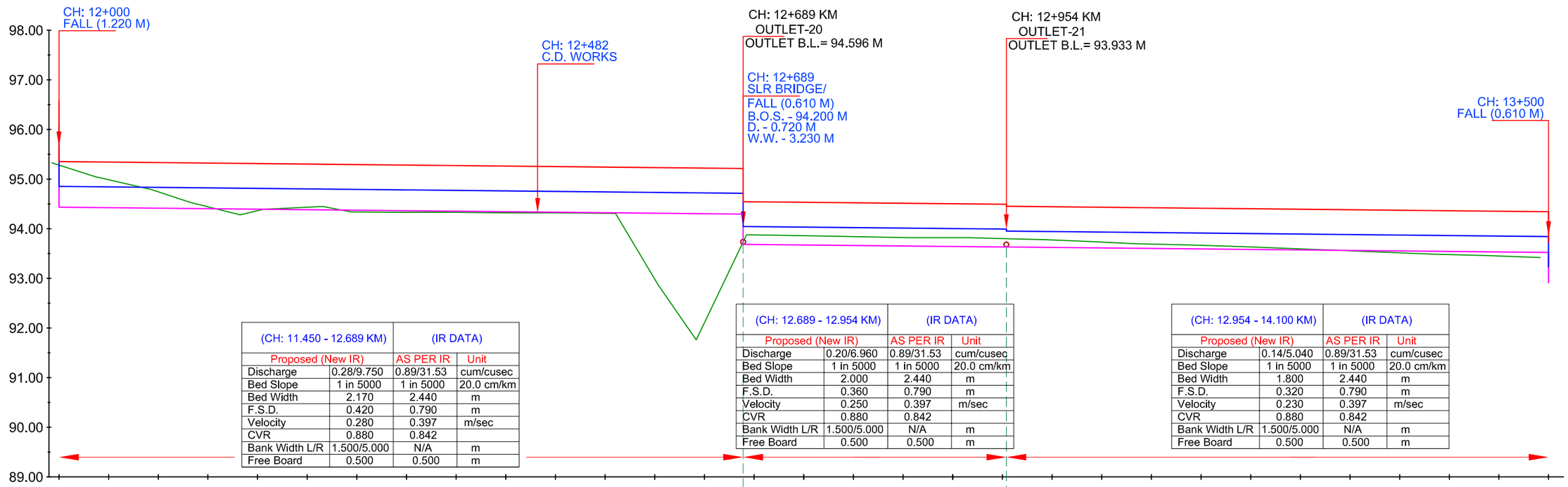
LEGEND

NSL		EXISTING BED LEVEL	
EXISTING TOP OF BANK		PROPOSED BED LEVEL	
EXISTING FALL		PROPOSED FSL	
MODIFIED FALL		PROPOSED TOP OF BANK LEVEL	
NEW FALL			

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ LSEC- 08 of 11

L- SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
FROM CH 12+000 TO 13+500



(CH: 11.450 - 12.689 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.28/9.750	0.89/31.53	cum/cusec
Bed Slope	1 in 5000	1 in 5000	20.0 cm/km
Bed Width	2.170	2.440	m
F.S.D.	0.420	0.790	m
Velocity	0.280	0.397	m/sec
CVR	0.880	0.842	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	0.500	m

(CH: 12.689 - 12.954 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.20/6.960	0.89/31.53	cum/cusec
Bed Slope	1 in 5000	1 in 5000	20.0 cm/km
Bed Width	2.000	2.440	m
F.S.D.	0.360	0.790	m
Velocity	0.250	0.397	m/sec
CVR	0.880	0.842	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	0.500	m

(CH: 12.954 - 14.100 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.14/5.040	0.89/31.53	cum/cusec
Bed Slope	1 in 5000	1 in 5000	20.0 cm/km
Bed Width	1.800	2.440	m
F.S.D.	0.320	0.790	m
Velocity	0.230	0.397	m/sec
CVR	0.880	0.842	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	0.500	m

DESIGN DATA	TOP OF BANK LEVEL	96.574 95.354	95.344	95.334	95.324	95.314	95.304	95.294	95.284	95.274	95.264	95.254	95.244	95.234	95.224	95.216 94.546	94.534	94.524	94.514	94.504	94.494 94.493	94.453	94.444	94.434	94.424	94.414	94.404	94.394	94.384	94.374	94.364	94.354	94.344 93.734
	F.S.L.	96.074 94.854	94.844	94.834	94.824	94.814	94.804	94.794	94.784	94.774	94.764	94.754	94.744	94.734	94.724	94.716 94.046	94.034	94.024	94.014	94.004	93.994 93.993	93.953	93.944	93.934	93.924	93.914	93.904	93.894	93.884	93.874	93.864	93.854	93.844 93.234
	Proposed Bed Level	95.654 94.434	94.424	94.414	94.404	94.394	94.384	94.374	94.364	94.354	94.344	94.334	94.324	94.314	94.304	94.296 93.686 93.684	93.674	93.664	93.654	93.644	93.634 93.633 93.633	93.624	93.614	93.604	93.594	93.584	93.574	93.564	93.554	93.544	93.534	93.524 92.914
EXISTING DATA	Bed Level																																
	TOP OF BANK LEVEL																																
	NSL	95.330	95.050	94.790	94.530	94.280 94.390	94.450	94.340	94.330	94.330	94.320	94.320	94.310	92.860	91.760	93.880	93.850	93.820	93.820	93.860	93.780	93.740	93.700	93.670	93.640	93.600	93.570	93.530	93.490	93.460	93.420		
	Chainage IN KM	12+000	12+050	12+100	12+150	12+200	12+250	12+300	12+350	12+400	12+450	12+500	12+550	12+600	12+650	12+689 12+700	12+750	12+800	12+850	12+900	12+950 12+954	13+000	13+050	13+100	13+150	13+200	13+250	13+300	13+350	13+400	13+450	13+500		

LEGEND

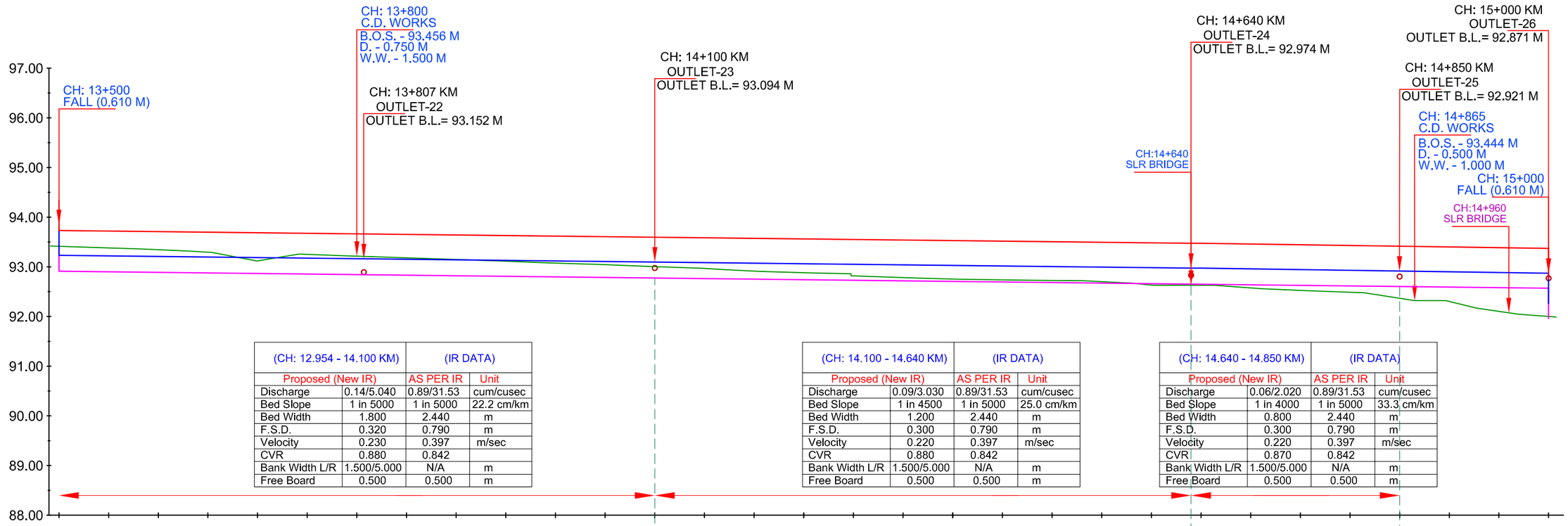
	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ LSEC- 09 of 11

L- SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
FROM CH 13+500 TO 15+000

(CH: 14.850 - 15.422 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.03/0.960	0.89/31.53	cum/cusec
Bed Slope	1 in 3000	1 in 5000	20.0 cm/km
Bed Width	0.500	2.440	m
F.S.D.	0.300	0.790	m
Velocity	0.200	0.397	m/sec
CVR	0.790	0.842	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	0.500	m



(CH: 12.954 - 14.100 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.14/5.040	0.89/31.53	cum/cusec
Bed Slope	1 in 5000	1 in 5000	22.2 cm/km
Bed Width	1.800	2.440	m
F.S.D.	0.320	0.790	m
Velocity	0.230	0.397	m/sec
CVR	0.880	0.842	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	0.500	m

(CH: 14.100 - 14.640 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.09/3.030	0.89/31.53	cum/cusec
Bed Slope	1 in 4500	1 in 5000	25.0 cm/km
Bed Width	1.200	2.440	m
F.S.D.	0.300	0.790	m
Velocity	0.220	0.397	m/sec
CVR	0.880	0.842	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	0.500	m

(CH: 14.640 - 14.850 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.06/2.020	0.89/31.53	cum/cusec
Bed Slope	1 in 4000	1 in 5000	33.3 cm/km
Bed Width	0.800	2.440	m
F.S.D.	0.300	0.790	m
Velocity	0.220	0.397	m/sec
CVR	0.870	0.842	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	0.500	m

		13+500	13+550	13+600	13+650	13+700	13+750	13+800	13+850	13+900	13+950	14+000	14+050	14+100	14+150	14+200	14+250	14+300	14+350	14+400	14+450	14+500	14+550	14+600	14+640	14+650	14+700	14+750	14+800	14+850	14+900	14+950	15+000
DESIGN DATA	TOP OF BANK LEVEL	94.344	93.724	93.714	93.704	93.694	93.684	93.674	93.664	93.654	93.644	93.634	93.624	93.614	93.582	93.571	93.560	93.549	93.538	93.527	93.516	93.505	93.494	93.482	93.474	93.471	93.459	93.446	93.434	93.421	93.404	93.388	93.371
	F.S.L.	93.844	93.224	93.214	93.204	93.194	93.184	93.174	93.164	93.154	93.144	93.134	93.124	93.114	93.082	93.071	93.060	93.049	93.038	93.027	93.016	93.005	92.994	92.982	92.974	92.971	92.959	92.946	92.934	92.921	92.904	92.888	92.871
	Proposed Bed Level	93.524	92.904	92.894	92.884	92.874	92.864	92.854	92.844	92.834	92.824	92.814	92.804	92.794	92.782	92.771	92.760	92.749	92.738	92.727	92.716	92.705	92.694	92.682	92.674	92.671	92.659	92.646	92.634	92.621	92.604	92.588	92.571
EXISTING DATA	Bed Level																																
	TOP OF BANK LEVEL																																
	NSL	93.420	93.390	93.360	93.320	93.290	93.120	93.260	93.220	93.190	93.150	93.120	93.080	93.050	93.010	92.970	92.940	92.910	92.880	92.880	92.780	92.750		92.730	92.720	92.670	92.630		92.630	92.560	92.520	92.480	92.320	92.320	92.170	92.050	91.990
Chainage IN KM																																	

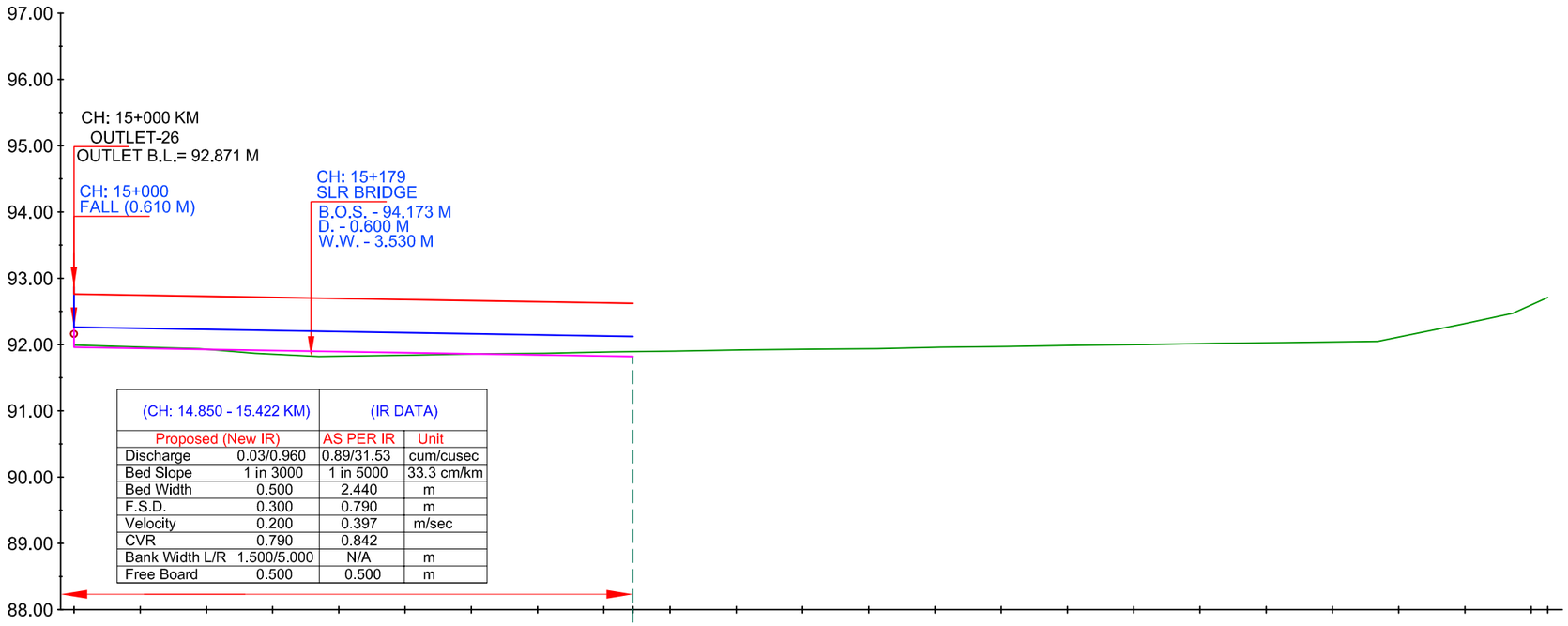
LEGEND

NSL		EXISTING BED LEVEL	
EXISTING TOP OF BANK		PROPOSED BED LEVEL	
EXISTING FALL		PROPOSED FSL	
MODIFIED FALL		PROPOSED TOP OF BANK LEVEL	
NEW FALL			

IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ LSEC- 10 of 11

L- SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
FROM CH 15+000 TO 16+113



(CH: 14.850 - 15.422 KM)		(IR DATA)	
Proposed (New IR)		AS PER IR	Unit
Discharge	0.03/0.960	0.89/31.53	cum/cusec
Bed Slope	1 in 3000	1 in 5000	33.3 cm/km
Bed Width	0.500	2.440	m
F.S.D.	0.300	0.790	m
Velocity	0.200	0.397	m/sec
CVR	0.790	0.842	
Bank Width L/R	1.500/5.000	N/A	m
Free Board	0.500	0.500	m

DESIGN DATA	TOP OF BANK LEVEL	93.371 92.761	92.744	92.728	92.711	92.694	92.678	92.661	92.644	92.628	92.620															
	F.S.L.	92.871 92.261	92.244	92.228	92.211	92.194	92.178	92.161	92.144	92.128	92.120															
	Proposed Bed Level	92.571 91.961	91.944	91.928	91.911	91.894	91.878	91.861	91.844	91.828	91.820															
EXISTING DATA	Bed Level																									
	TOP OF BANK LEVEL																									
	NSL	91.990	91.960	91.940	91.870	91.820	91.840	91.860	91.870	91.890	91.900	91.920	91.930	91.940	91.960	91.970	91.990	92.000	92.020	92.030	92.050	92.160	92.310	92.470	92.710	
	Chainage IN KM	15+000	15+050	15+100	15+150	15+200	15+250	15+300	15+350	15+400	15+422	15+450	15+500	15+550	15+600	15+650	15+700	15+750	15+800	15+850	15+900	15+950	16+000	16+050	16+100	16+113

LEGEND

	NSL		EXISTING BED LEVEL
	EXISTING TOP OF BANK		PROPOSED BED LEVEL
	EXISTING FALL		PROPOSED FSL
	MODIFIED FALL		PROPOSED TOP OF BANK LEVEL
	NEW FALL		

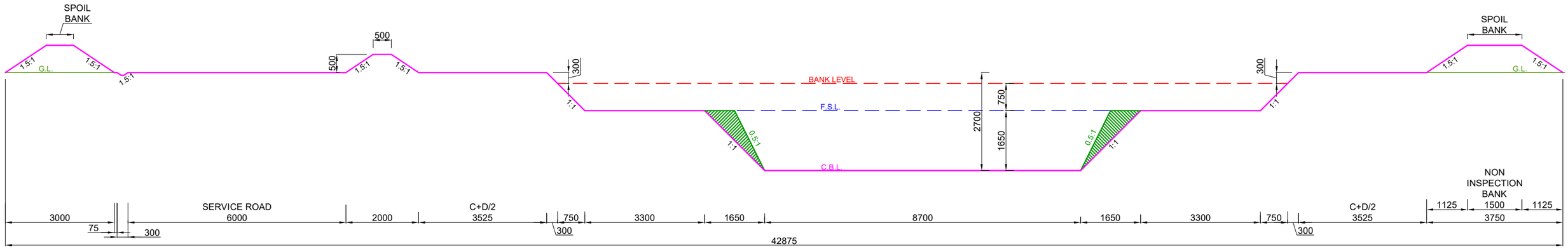
IMPLEMENTING AGENCY :-
WAPCOS LTD.

PROJECT TITLE :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
DRAWING TITLE :-	L- SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
DRAWING NO. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ LSEC- 11 of 11

TYPICAL X-SECTION

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 0.000 KM TO CH: 9.050 KM

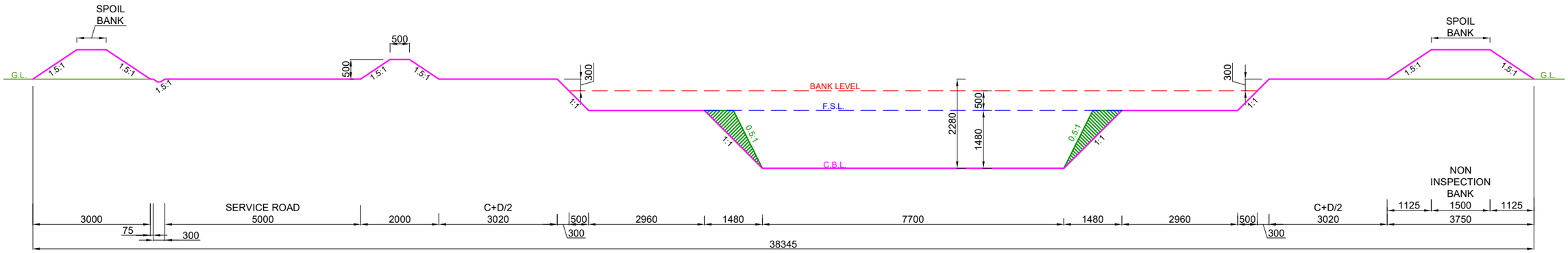
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	CUT AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
	FILL AREA		Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FC) 1 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 9.050 KM TO CH: 15.722 KM

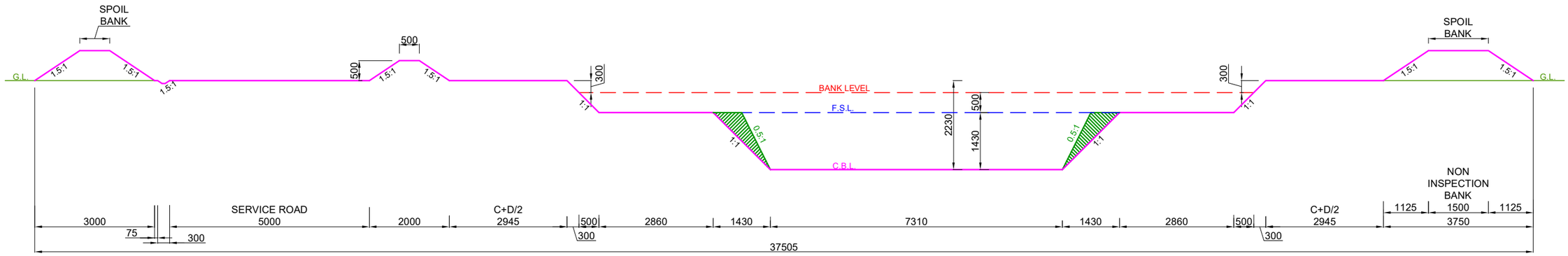
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FC) 2 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 15.722 KM TO CH: 19.980 KM

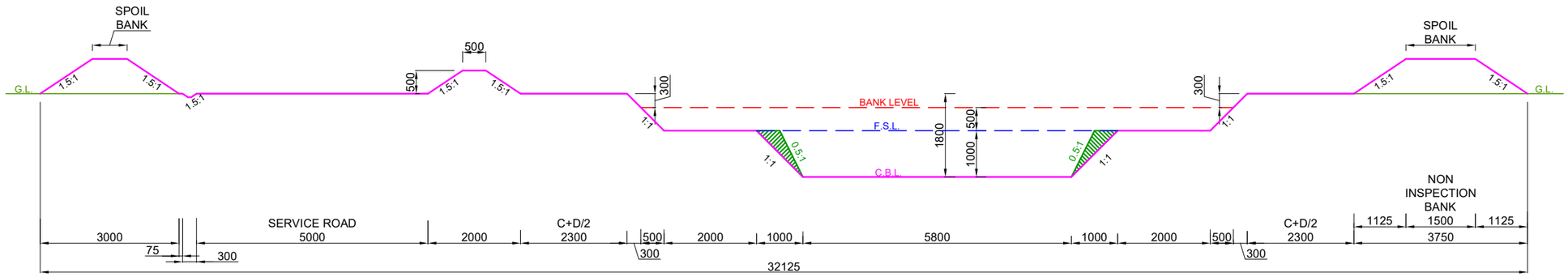
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FC) 3 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 19.980 KM TO CH: 22.300 KM

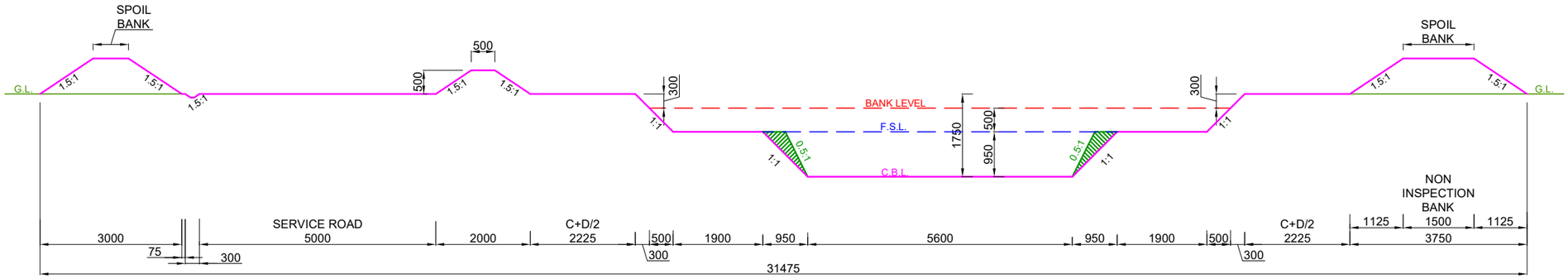
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FC) 4 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 22.300 KM TO CH: 23.701 KM

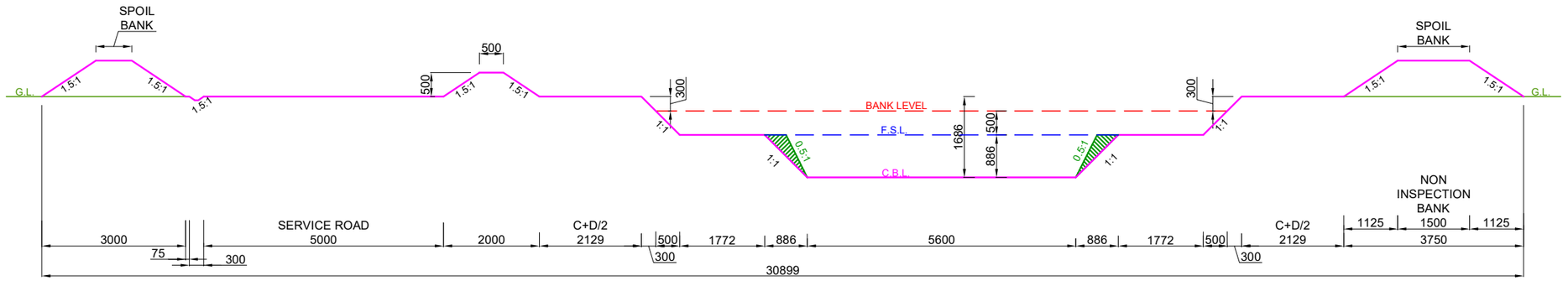
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	CUT AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
	FILL AREA		Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FC) 5 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 23.701 KM TO CH: 26.975 KM

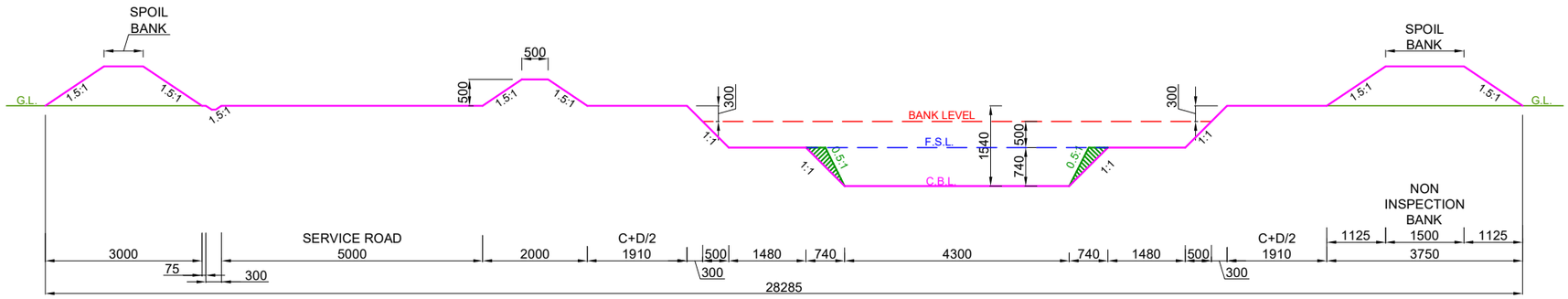
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FC) 6 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 26.975 KM TO CH: 28.800 KM

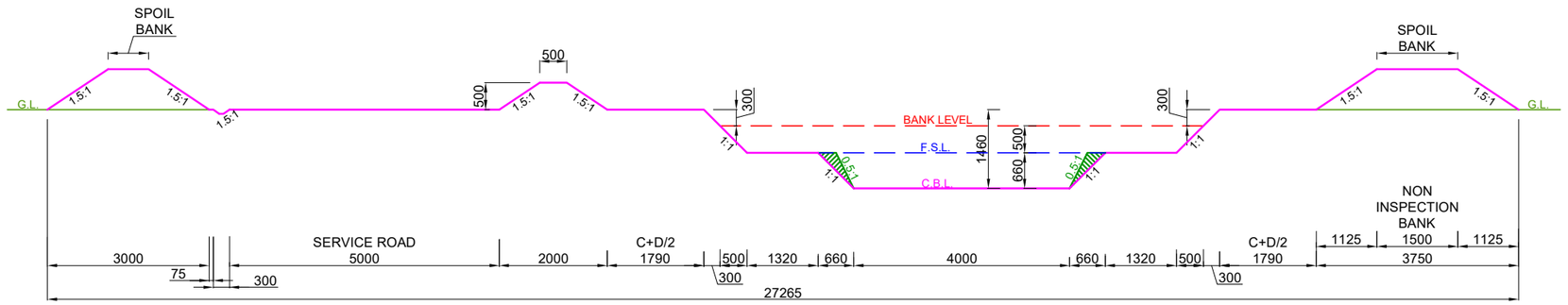
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	CUT AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
	FILL AREA		Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FC) 7 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 28.800 KM TO CH: 31.525 KM

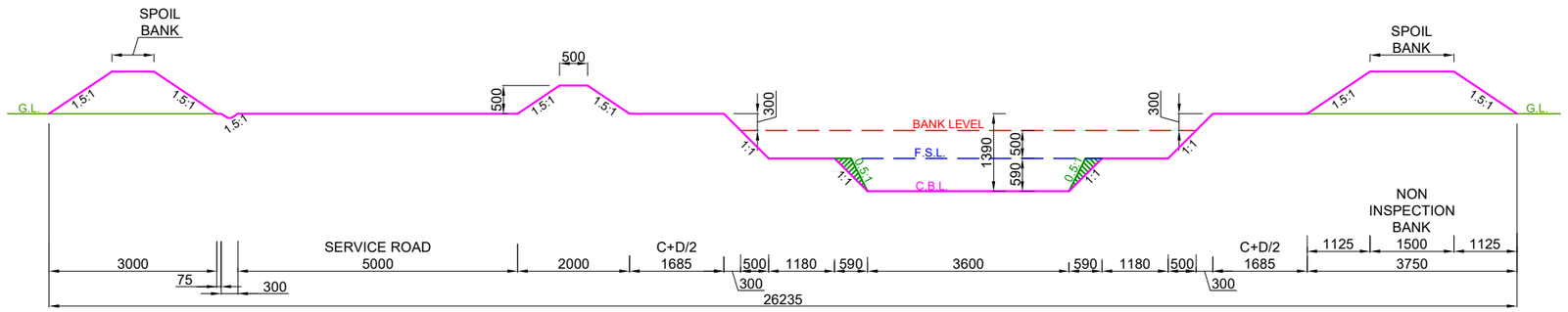
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FC) 8 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 31.525 KM TO CH: 31.530 KM

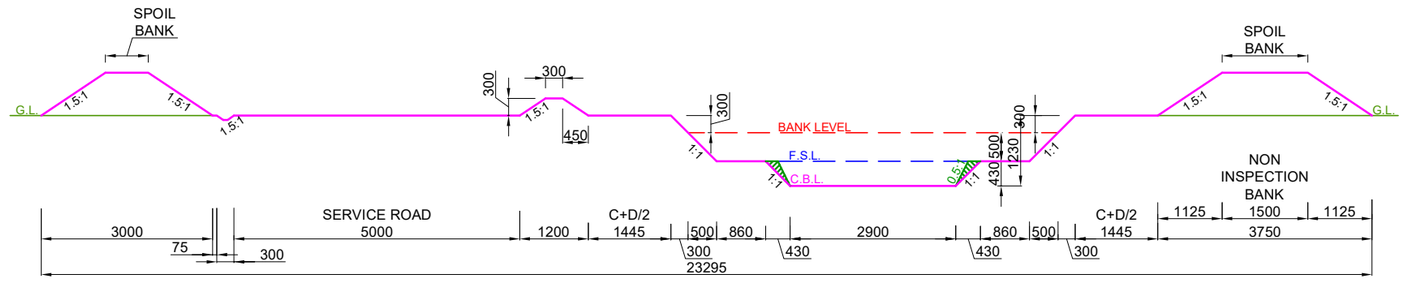
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FC) 9 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 31.530 KM TO CH: 31.925 KM

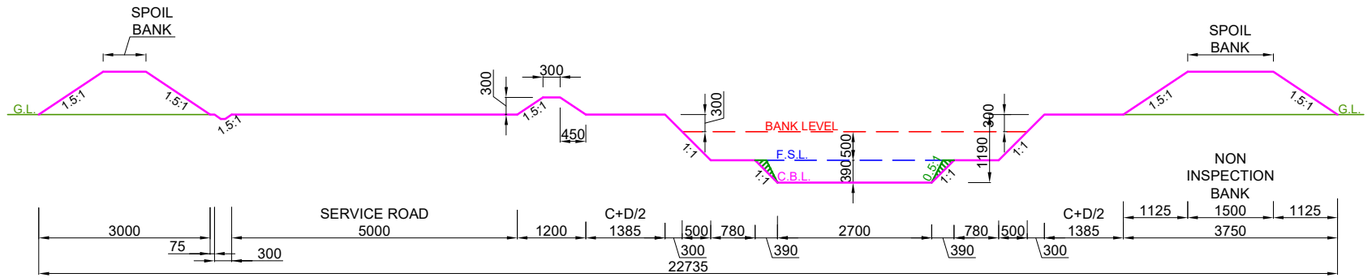
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FC) 10 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 31.925 KM TO CH: 33.500 KM

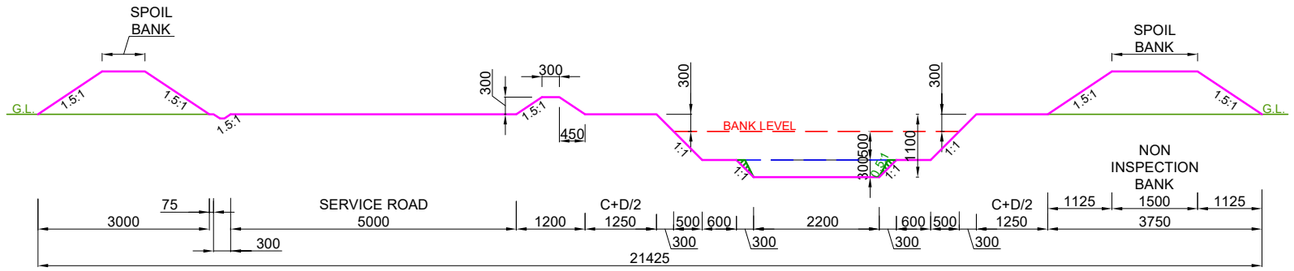
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FC) 11 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 33.500 KM TO CH: 34.747 KM

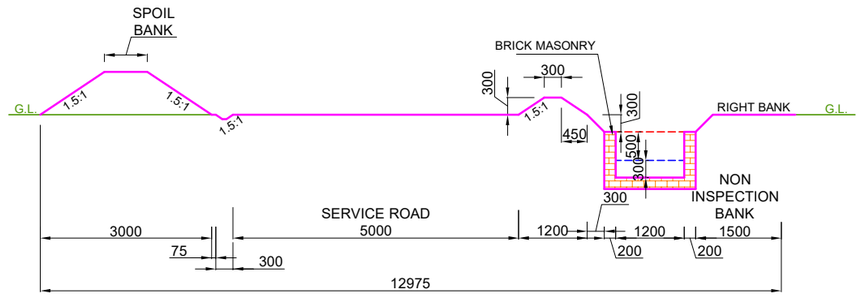
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FC) 12 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 34.747 KM TO CH: 36.450 KM

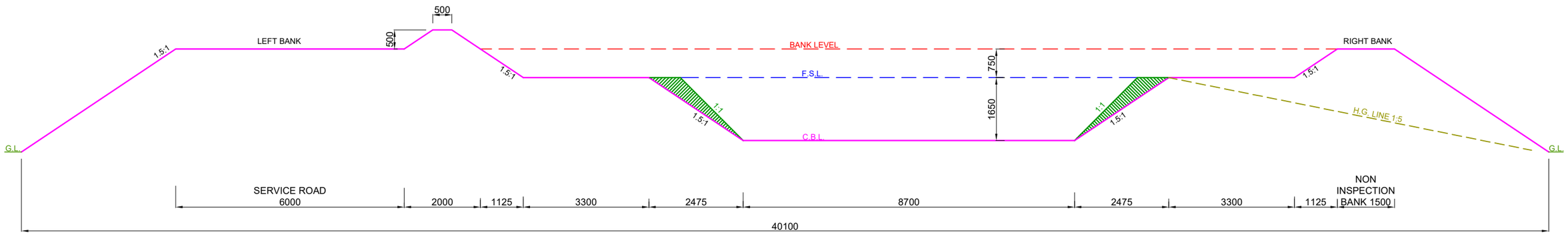
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FC) 13 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 0.000 KM TO CH: 9.050 KM

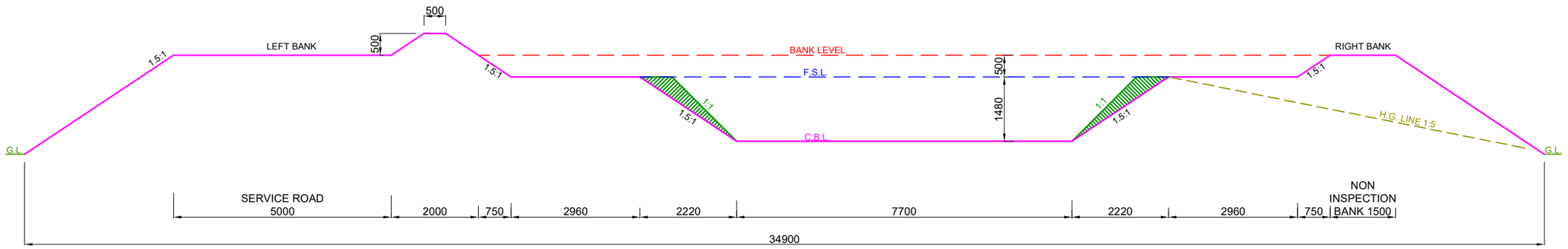
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FF) 1 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 9.050 KM TO CH: 15.722 KM

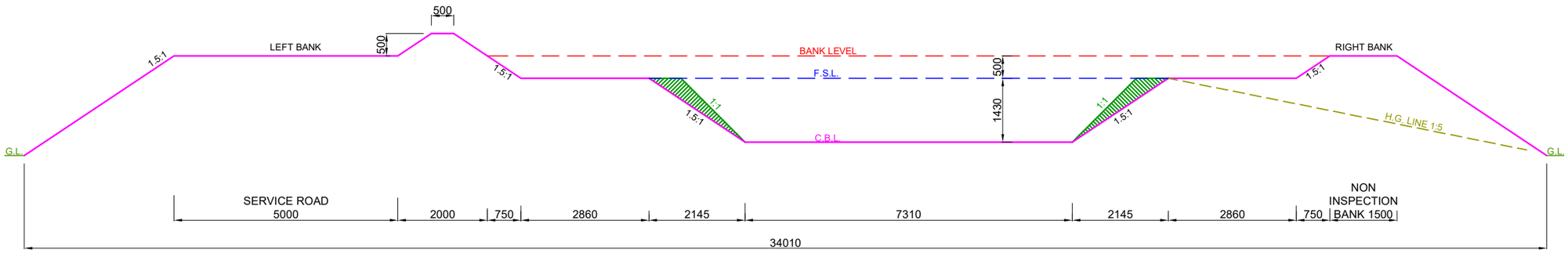
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FF) 2 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 15.722 KM TO CH: 19.980 KM

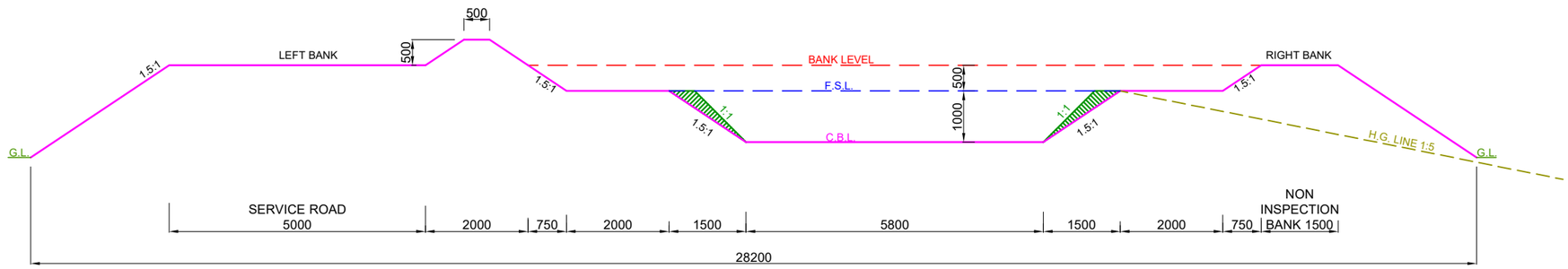
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FF) 3 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 19.980 KM TO CH: 22.300 KM

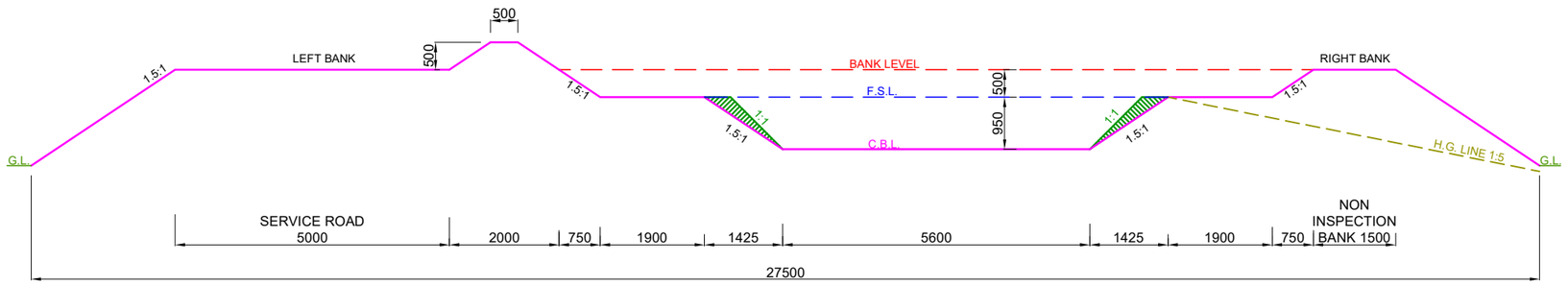
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FF) 4 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 22.300 KM TO CH: 23.701 KM

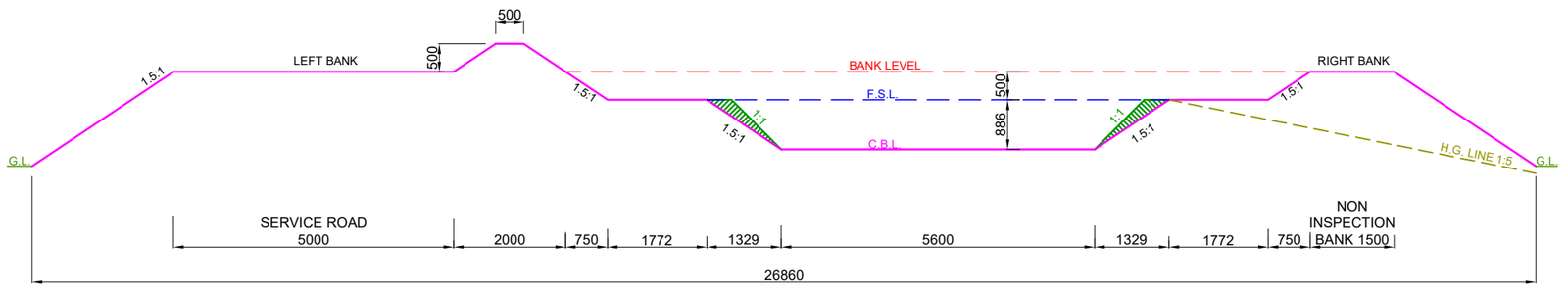
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FF) 5 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 23.701 KM TO CH: 26.975 KM

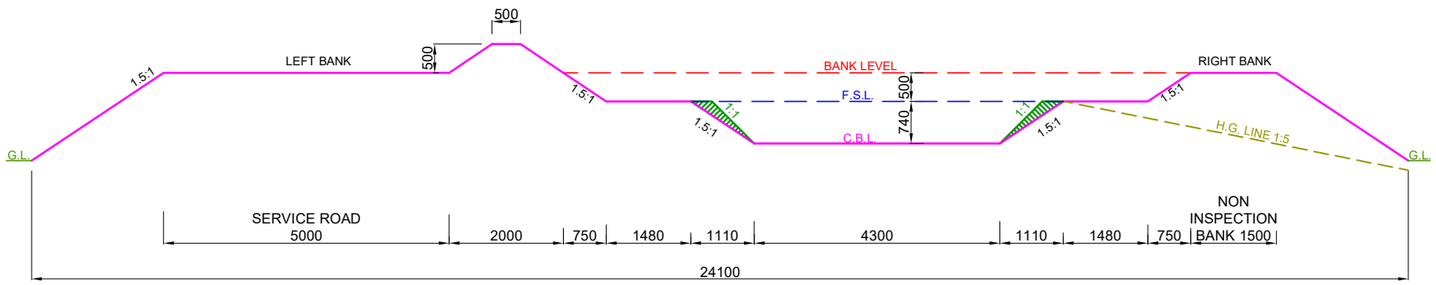
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FF) 6 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 26.975 KM TO CH: 28.800 KM

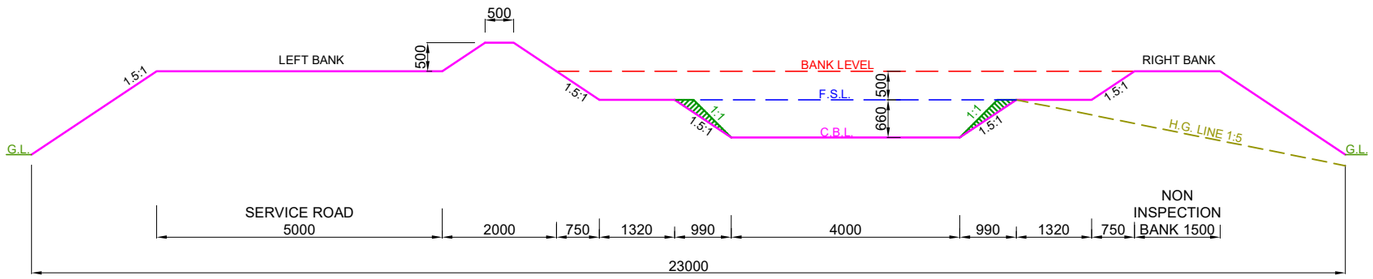
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FF) 7 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 28.800 KM TO CH: 31.525 KM

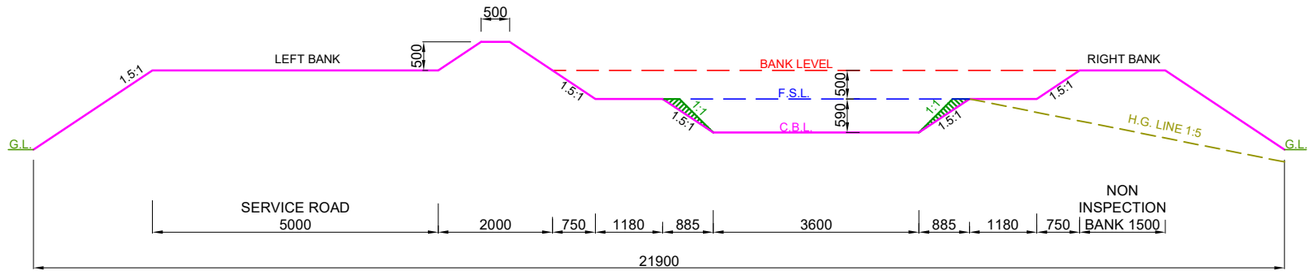
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FF) 8 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 31.525 KM TO CH: 31.530 KM

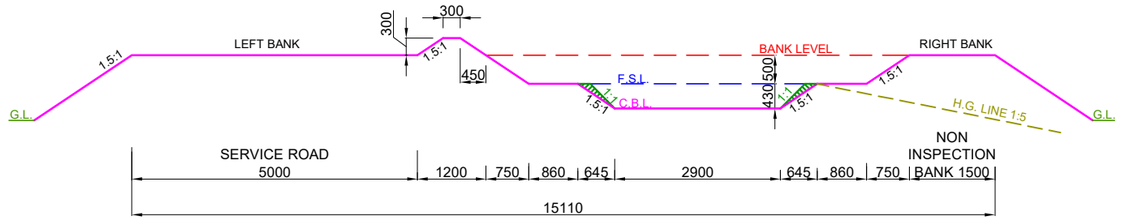
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FF) 9 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 31.530 KM TO CH: 31.925 KM

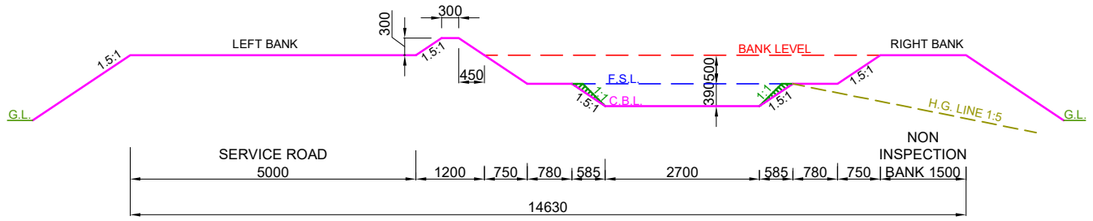
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FF) 10 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 31.925 KM TO CH: 33.500 KM

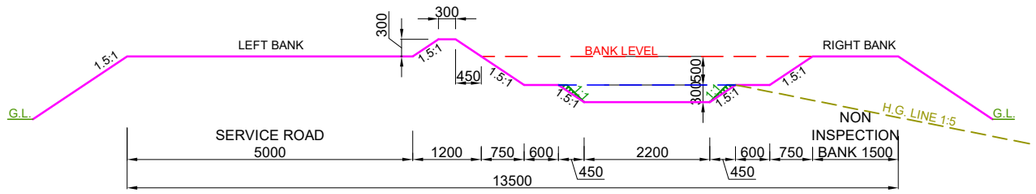
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FF) 11 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 33.500 KM TO CH: 34.747 KM

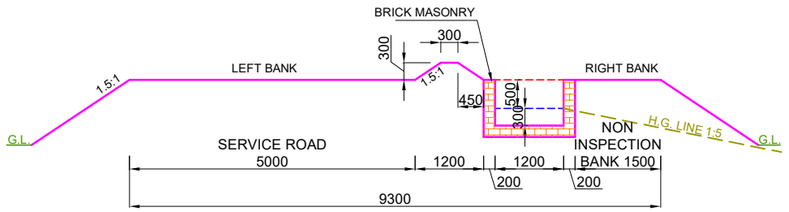
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FF) 12 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 34.747 KM TO CH: 36.450 KM

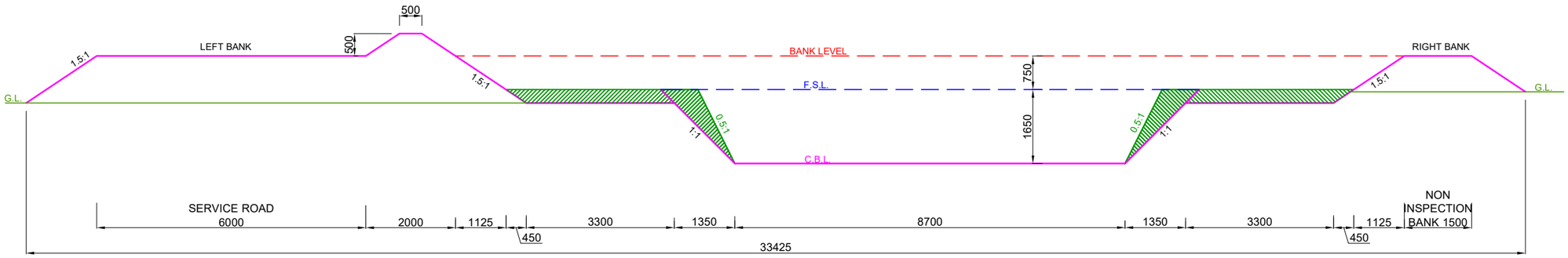
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(FF) 13 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR PARTLY CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 0.000 KM TO CH: 9.050 KM

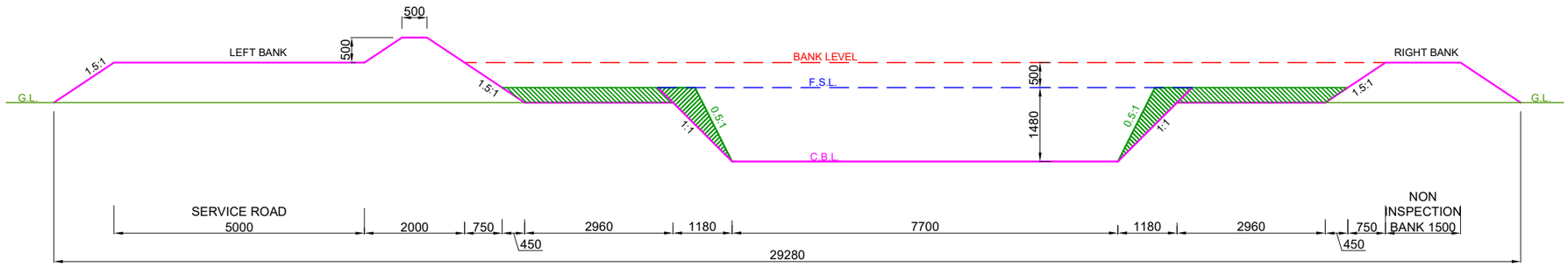
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(PCF) 1 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR PARTLY CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 9.050 KM TO CH: 15.722 KM

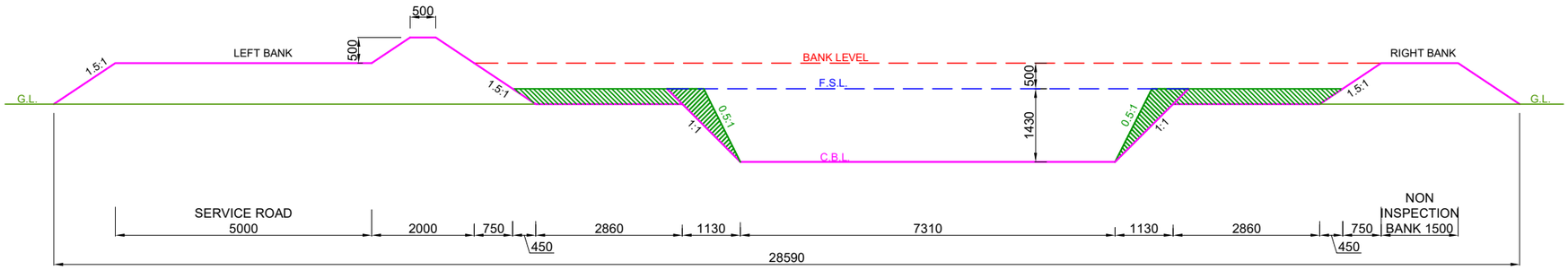
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(PCF) 2 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR PARTLY CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 15.722 KM TO CH: 19.980 KM

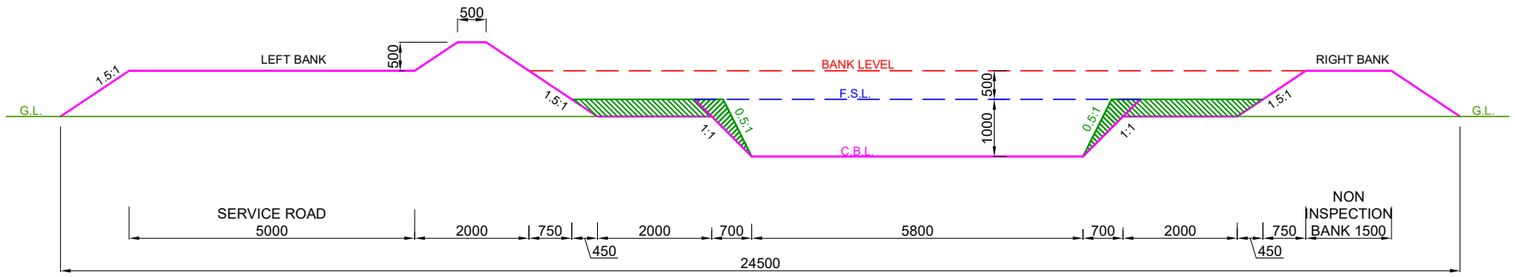
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	CUT AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
	FILL AREA		Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(PCF) 3 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR PARTLY CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 19.980 KM TO CH: 22.300 KM

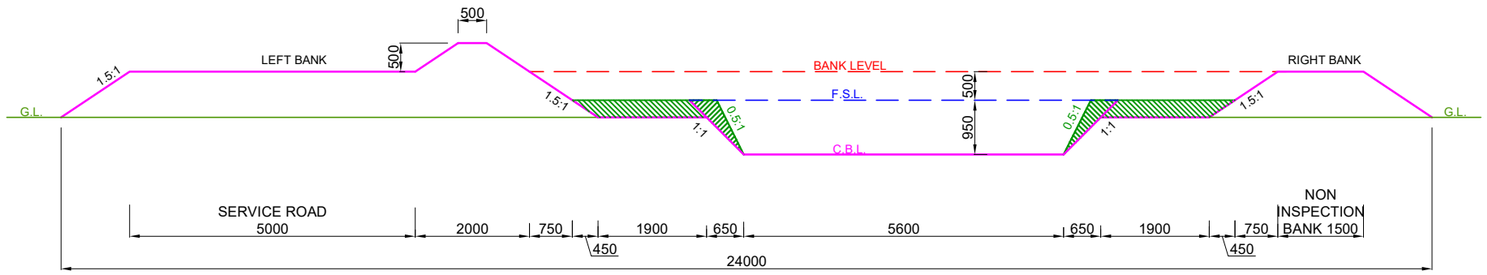
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(PCF) 4 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR PARTLY CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 22.300 KM TO CH: 23.701 KM

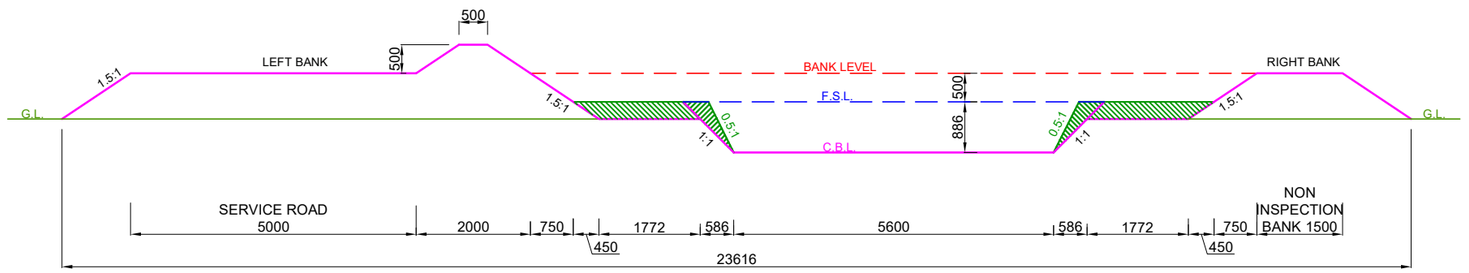
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(PCF) 5 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR PARTLY CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 23.701 KM TO CH: 26.975 KM

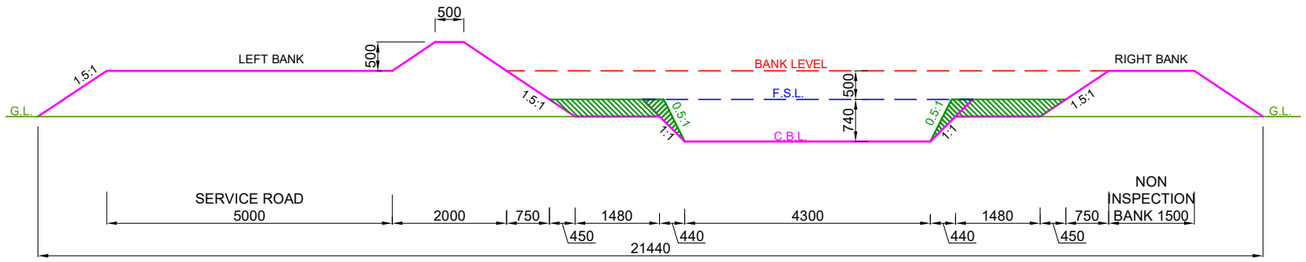
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(PCF) 6 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR PARTLY CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 26.975 KM TO CH: 28.800 KM

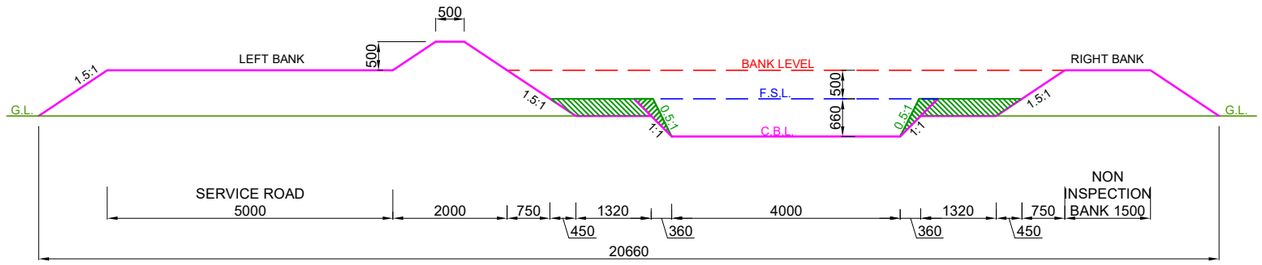
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(PCF) 7 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR PARTLY CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 28.800 KM TO CH: 31.525 KM

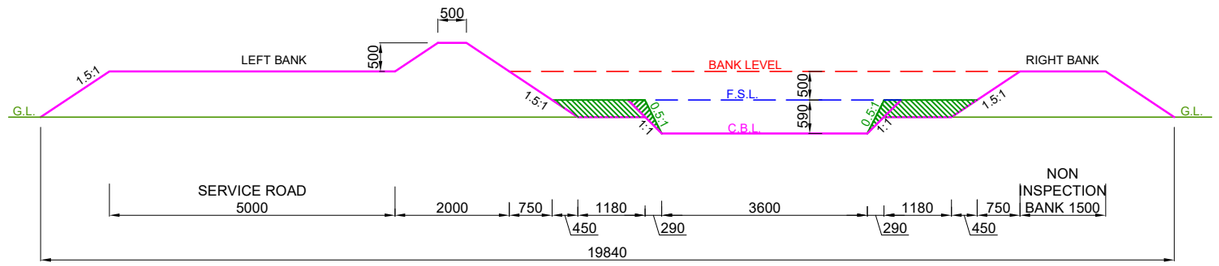
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(PCF) 8 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR PARTLY CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 31.525 KM TO CH: 31.530 KM

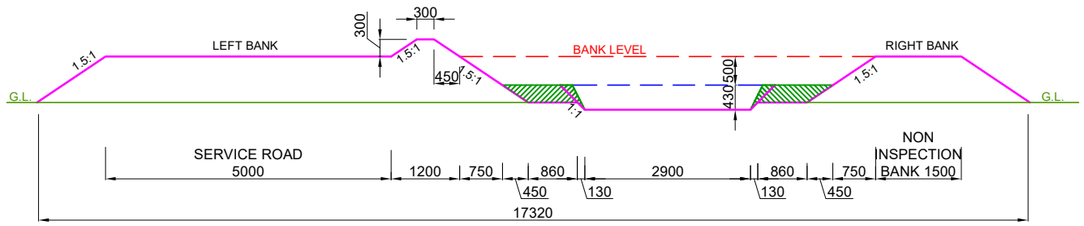
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(PCF) 9 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR PARTLY CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 31.530 KM TO CH: 31.925 KM

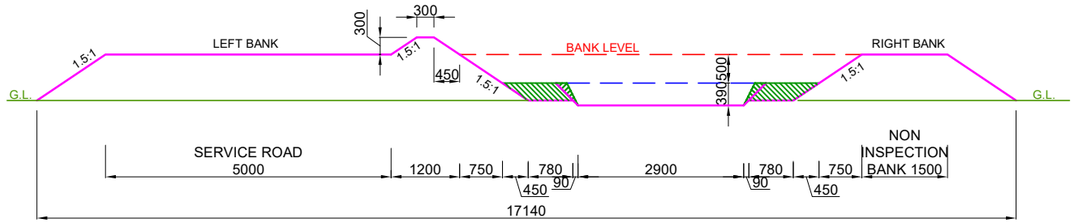
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(PCF) 10 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR PARTLY CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 31.925 KM TO CH: 33.500 KM

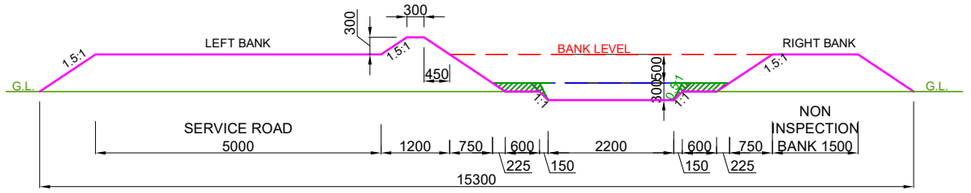
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(PCF) 11 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR PARTLY CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 33.500 KM TO CH: 34.747 KM

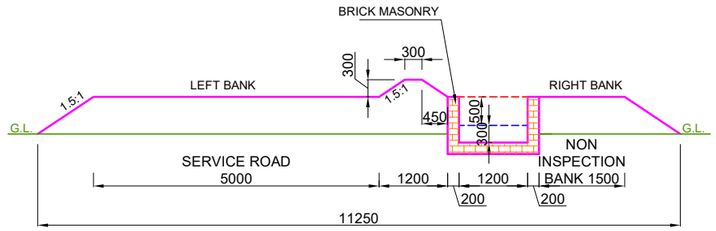
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(PCF) 12 of 13

TYPICAL X - SECTION OF ANGRA BRANCH CANAL
(OFFTAKE FROM RD - 103+660 KM. (LT), NORTH KOEL RIGHT MAIN CANAL)

DESIGN SECTION FOR PARTLY CUTTING/ PARTLY FILLING



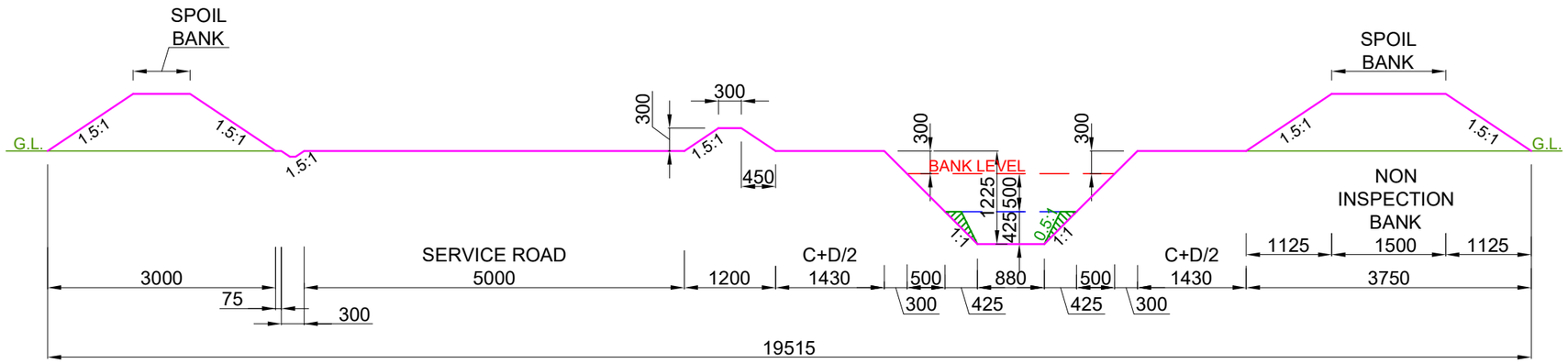
DESIGN SECTION FROM CH: 34.747 KM TO CH: 36.450 KM

NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X SECTION OF ANGRA BR. CANAL (OFFTAKE FROM RD - 103+660 KM. (L), NORTH KOEL RIGHT MAIN CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37/ XSEC /TYP-(PCF) 13 of 13

TYPICAL X - SECTION OF PALUA MR.
(OFFTAKE FROM RD - 0+350 KM., ANGRA BRANCH CANAL)
DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 0.000 KM TO CH: 0.305 KM

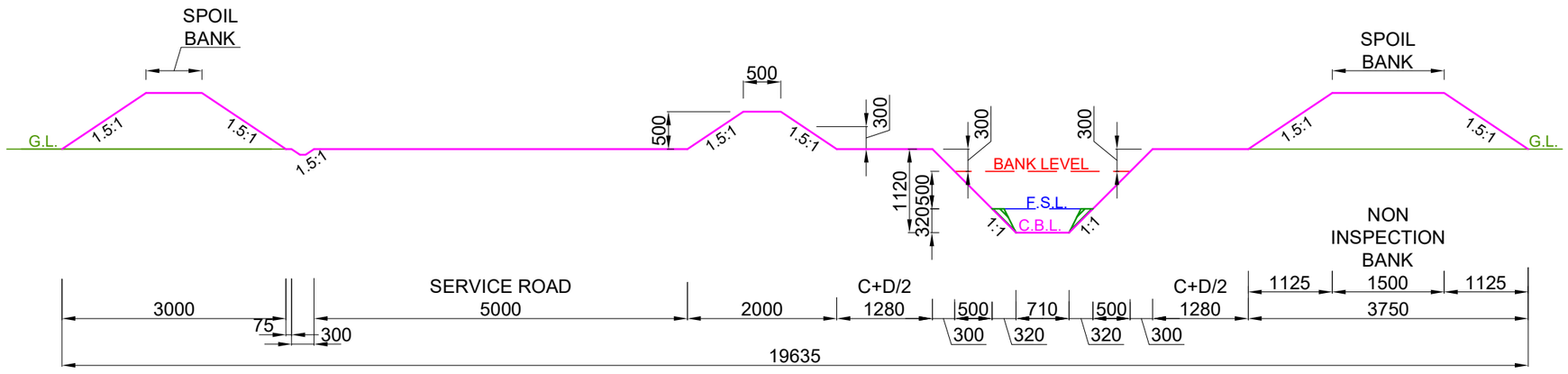
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
CUT AREA			Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
FILL AREA			Drawing Title :-	X - SECTION OF PALUA MR. (OFFTAKE FROM RD -0+350 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-01/ XSEC /TYP-(FC) 1 of 3

TYPICAL X - SECTION OF PALUA MR.
(OFFTAKE FROM RD - 0+350 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 0.305 KM TO CH: 0.762 KM

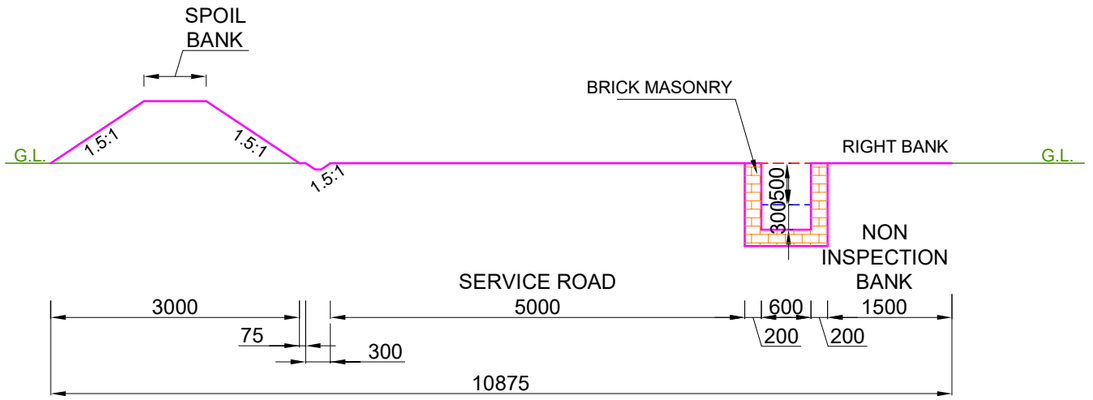
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PALUA MR. (OFFTAKE FROM RD -0+350 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-01/ XSEC /TYP-(FC) 2 of 3

TYPICAL X - SECTION OF PALUA MR.
(OFFTAKE FROM RD - 0+350 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 0.762 KM TO CH: 2.625 KM

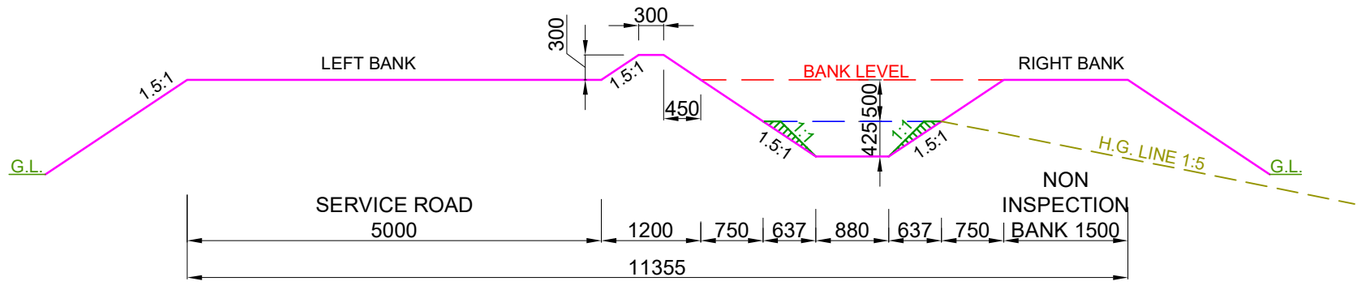
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PALUA MR. (OFFTAKE FROM RD -0+350 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-01/ XSEC /TYP-(FC) 3 of 3

TYPICAL X - SECTION OF PALUA MR.
(OFFTAKE FROM RD - 0+350 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 0.000 KM TO CH: 0.305 KM

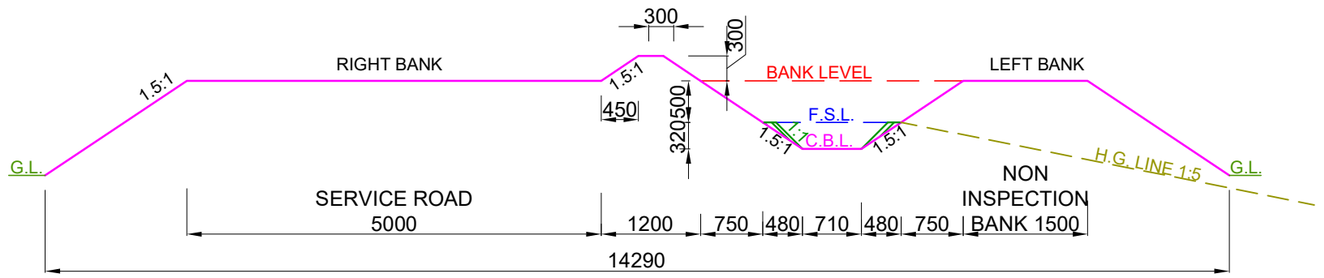
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PALUA MR. (OFFTAKE FROM RD -0+350 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-01/ XSEC /TYP-(FF) 1 of 3

TYPICAL X - SECTION OF PALUA MR.
(OFFTAKE FROM RD - 0+350 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 0.305 KM TO CH: 0.762 KM

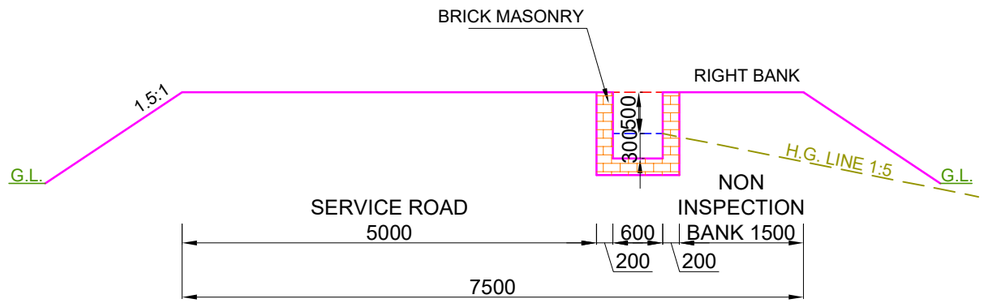
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PALUA MR. (OFFTAKE FROM RD -0+350 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-01/ XSEC /TYP-(FF) 2 of 3

TYPICAL X - SECTION OF PALUA MR.
(OFFTAKE FROM RD - 0+350 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 0.762 KM TO CH: 2.625 KM

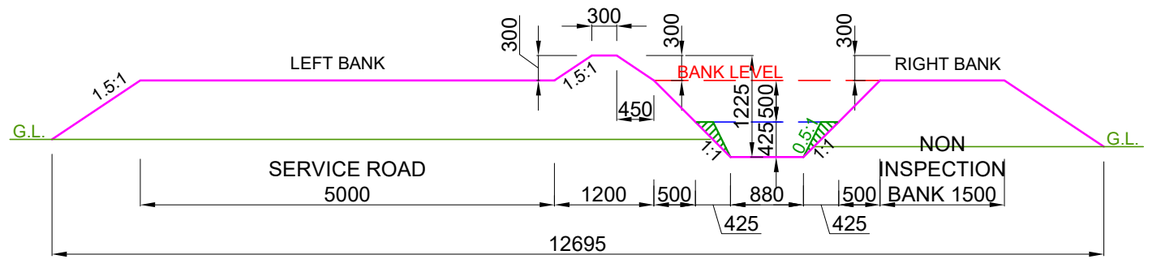
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PALUA MR. (OFFTAKE FROM RD -0+350 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-01/ XSEC /TYP-(FF) 3 of 3

TYPICAL X - SECTION OF PALUA MR.
(OFFTAKE FROM RD - 0+350 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR PARTLY CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 0.000 KM TO CH: 0.305 KM

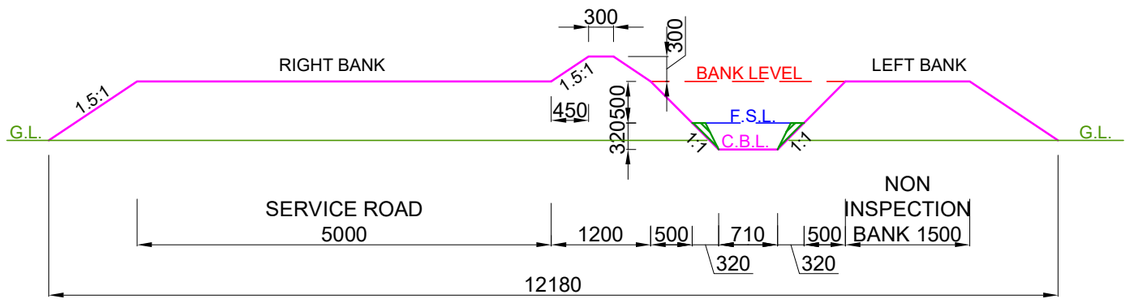
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PALUA MR. (OFFTAKE FROM RD -0+350 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-01/ XSEC /TYP-(PCF) 1 of 3

TYPICAL X - SECTION OF PALUA MR.
(OFFTAKE FROM RD - 0+350 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR PARTLY CUTTING/ PARTLY FILLING



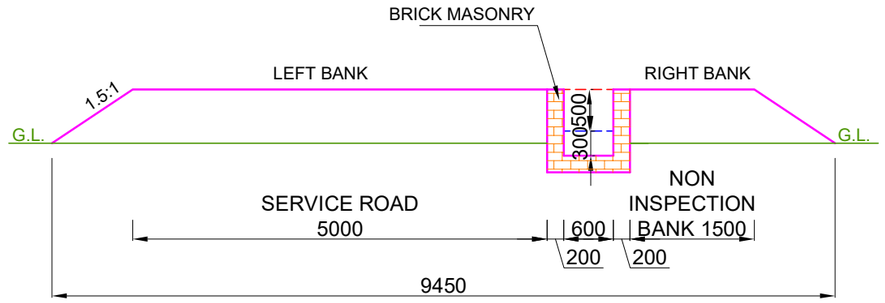
DESIGN SECTION FROM CH: 0.305 KM TO CH: 0.762 KM

NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PALUA MR. (OFFTAKE FROM RD -0+350 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-01/ XSEC /TYP-(PCF) 2 of 3

TYPICAL X - SECTION OF PALUA MR.
(OFFTAKE FROM RD - 0+350 KM., ANGRA BRANCH CANAL)
DESIGN SECTION FOR PARTLY CUTTING/ PARTLY FILLING



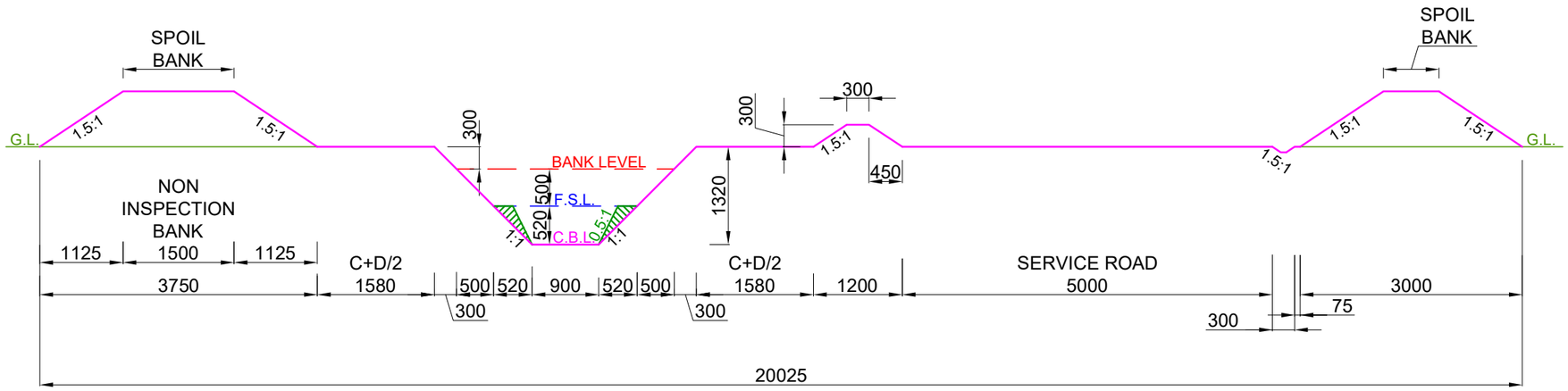
DESIGN SECTION FROM CH: 0.762 KM TO CH: 2.625 KM

NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PALUA MR. (OFFTAKE FROM RD -0+350 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-01/ XSEC /TYP-(PCF) 3 of 3

TYPICAL X - SECTION OF ASHNI MR.
(OFFTAKE FROM RD - 4+240 KM., ANGRA BRANCH CANAL)
DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 0.000 KM TO CH: 0.732 KM

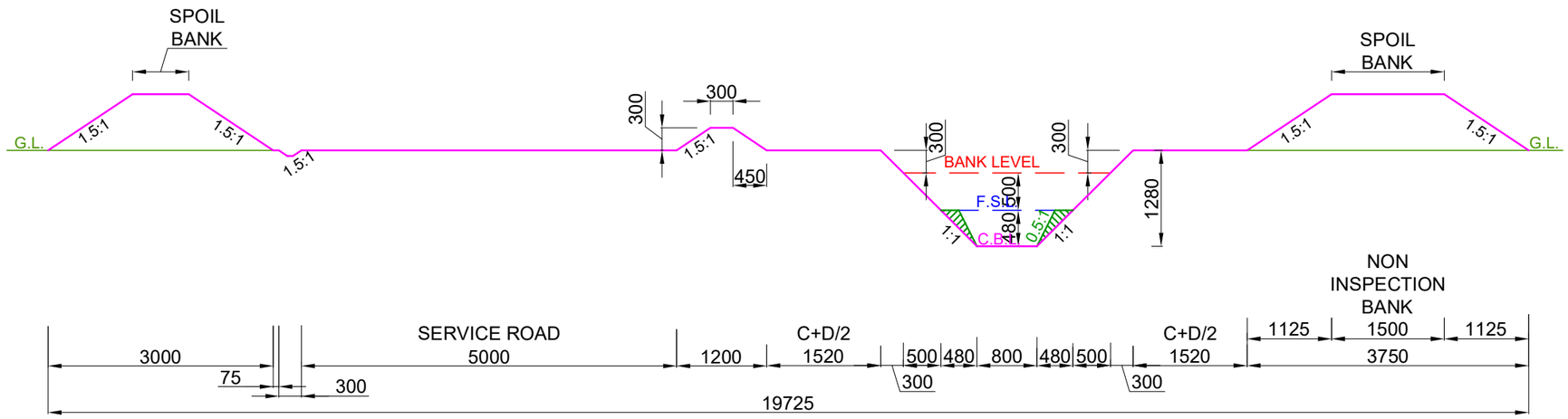
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATHRA MR. (OFFTAKE FROM RD -4+240 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-02/ XSEC /TYP-(FC) 1 of 4

TYPICAL X - SECTION OF ASHNI MR.
(OFFTAKE FROM RD - 4+240 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 0.732 KM TO CH: 2.600 KM

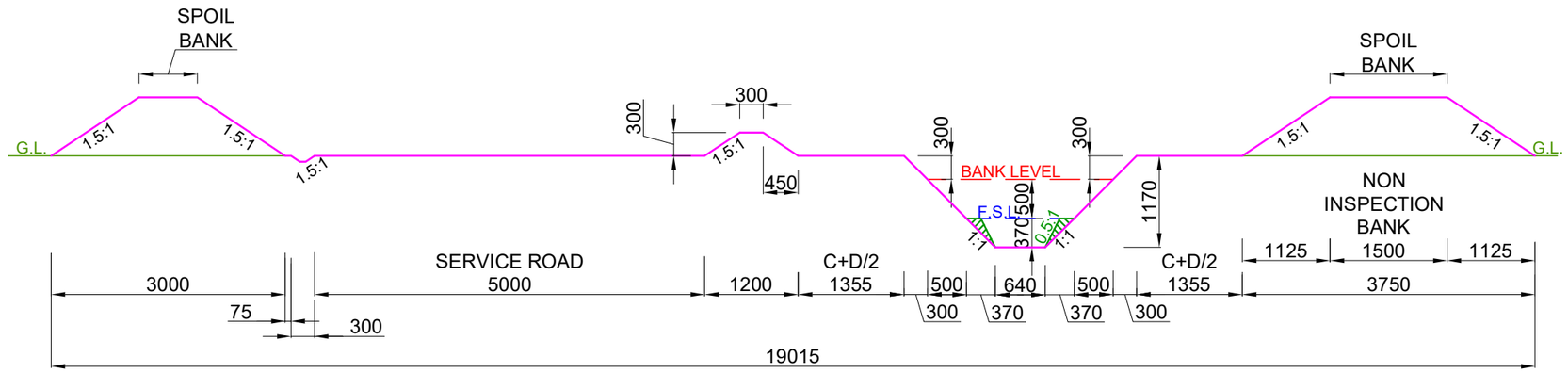
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATHRA MR. (OFFTAKE FROM RD -4+240 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-02/ XSEC /TYP-(FC) 2 of 4

TYPICAL X - SECTION OF ASHNI MR.
(OFFTAKE FROM RD - 4+240 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 2.600 KM TO CH: 3.277 KM

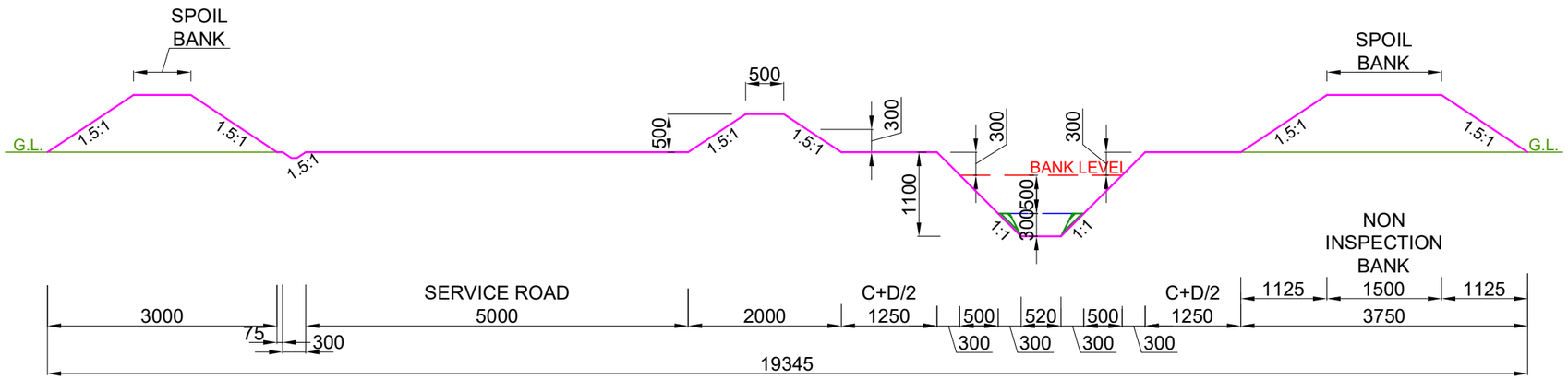
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	CUT AREA		Drawing Title :-	X - SECTION OF PATHRA MR. (OFFTAKE FROM RD -4+240 KM., ANGRA BRANCH CANAL)
	FILL AREA		Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-02/ XSEC /TYP-(FC) 3 of 4

TYPICAL X - SECTION OF ASHNI MR.
(OFFTAKE FROM RD - 4+240 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 3.277 KM TO CH: 4.650 KM

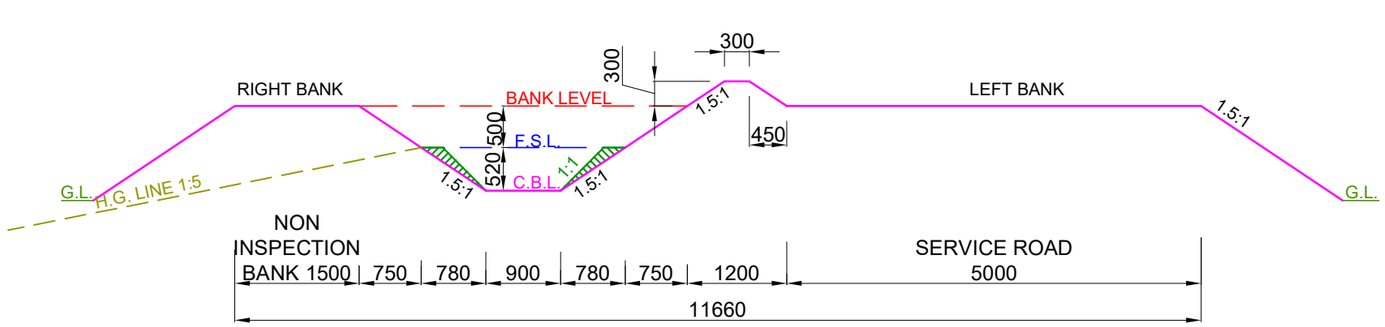
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATHRA MR. (OFFTAKE FROM RD -4+240 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-02/ XSEC /TYP-(FC) 4 of 4

TYPICAL X - SECTION OF ASHNI MR.
(OFFTAKE FROM RD - 4+240 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 0.000 KM TO CH: 0.732 KM

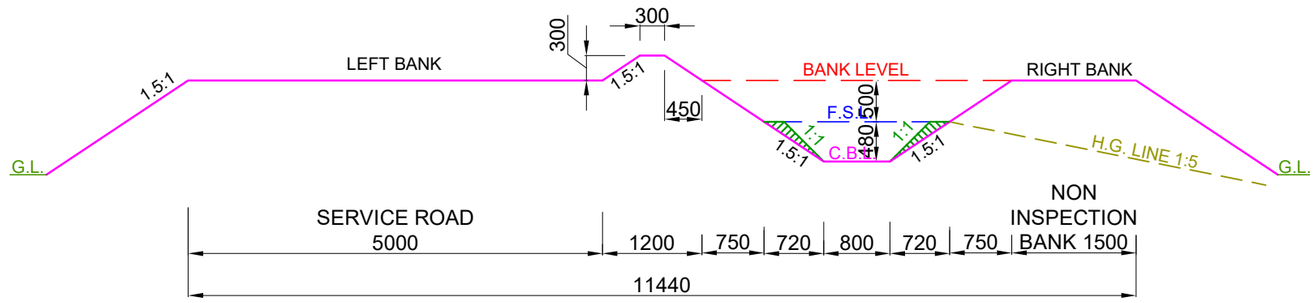
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATHRA MR. (OFFTAKE FROM RD -4+240 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-02/ XSEC /TYP-(FF) 1 of 4

TYPICAL X - SECTION OF ASHNI MR.
(OFFTAKE FROM RD - 4+240 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 0.732 KM TO CH: 2.600 KM

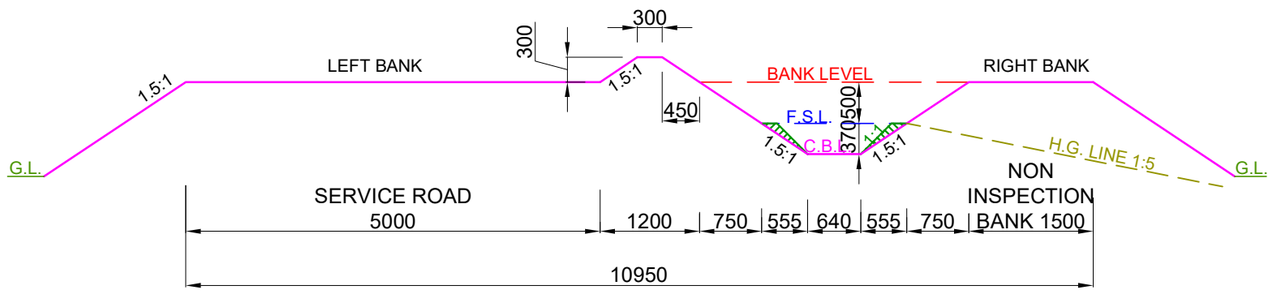
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATHRA MR. (OFFTAKE FROM RD -4+240 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-02/ XSEC /TYP-(FF) 2 of 4

TYPICAL X - SECTION OF ASHNI MR.
(OFFTAKE FROM RD - 4+240 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 2.600 KM TO CH: 3.277 KM

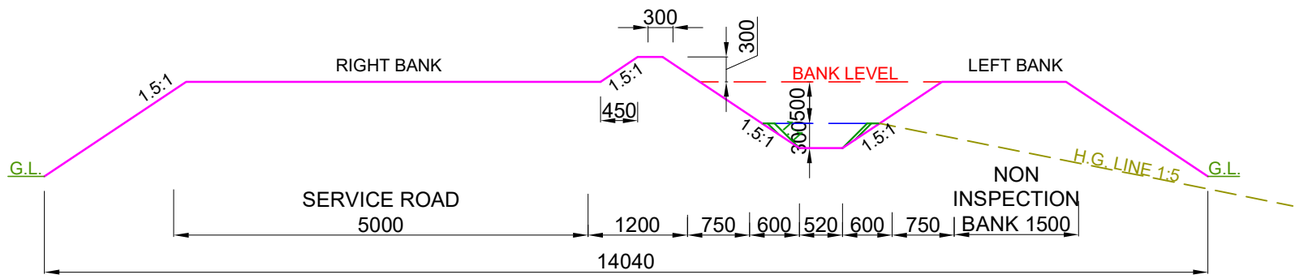
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATHRA MR. (OFFTAKE FROM RD -4+240 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-02/ XSEC /TYP-(FF) 3 of 4

TYPICAL X - SECTION OF ASHNI MR.
(OFFTAKE FROM RD - 4+240 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 3.277 KM TO CH: 4.650 KM

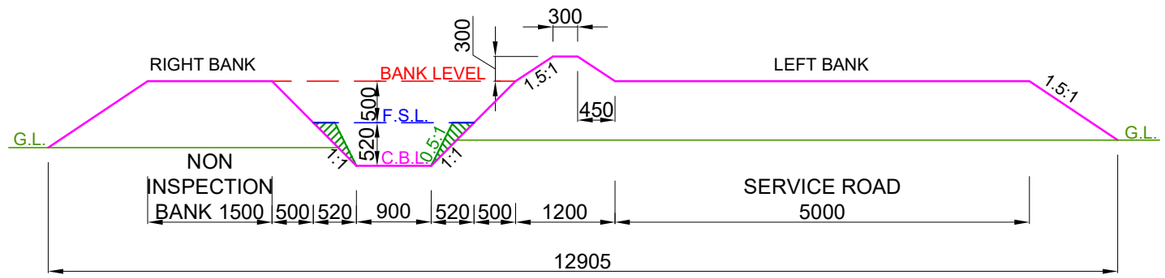
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATHRA MR. (OFFTAKE FROM RD -4+240 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-02/ XSEC /TYP-(FF) 4 of 4

TYPICAL X - SECTION OF ASHNI MR.
(OFFTAKE FROM RD - 4+240 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR PARTLY CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 0.000 KM TO CH: 0.732 KM

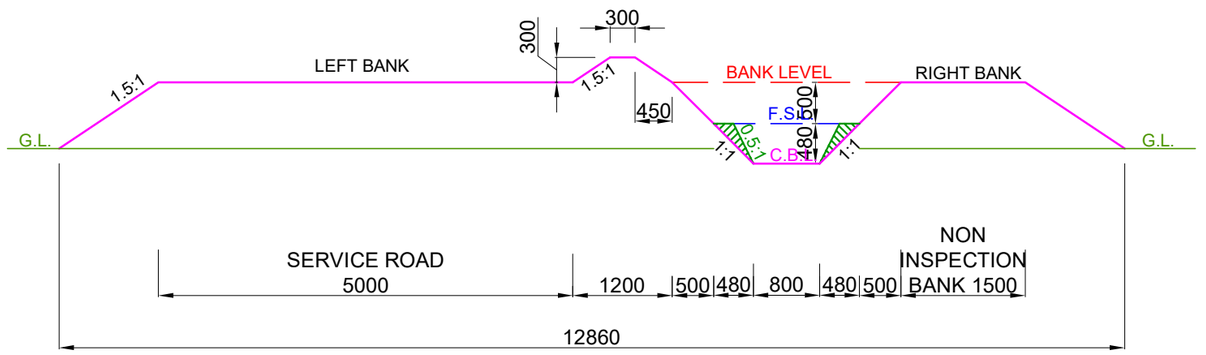
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATHRA MR. (OFFTAKE FROM RD -4+240 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-02/ XSEC /TYP-(PCF) 1 of 4

TYPICAL X - SECTION OF ASHNI MR.
(OFFTAKE FROM RD - 4+240 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR PARTLY CUTTING/ PARTLY FILLING



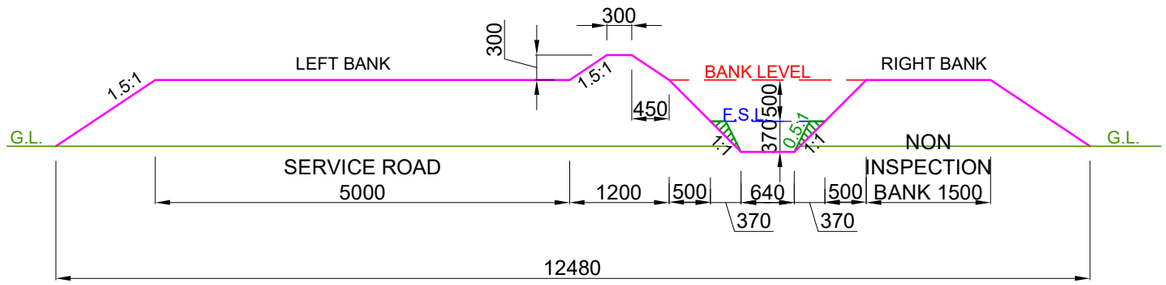
DESIGN SECTION FROM CH: 0.732 KM TO CH: 2.600 KM

NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	CUT AREA		Drawing Title :-	X - SECTION OF PATHRA MR. (OFFTAKE FROM RD -4+240 KM., ANGRA BRANCH CANAL)
	FILL AREA		Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-02/ XSEC /TYP-(PCF) 2 of 4

TYPICAL X - SECTION OF ASHNI MR.
(OFFTAKE FROM RD - 4+240 KM., ANGRA BRANCH CANAL)
DESIGN SECTION FOR PARTLY CUTTING/ PARTLY FILLING



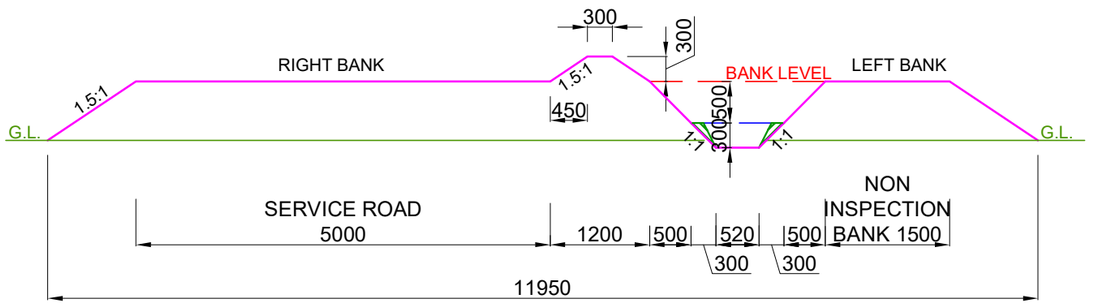
DESIGN SECTION FROM CH: 2.600 KM TO CH: 3.277 KM

NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATHRA MR. (OFFTAKE FROM RD -4+240 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-02/ XSEC /TYP-(PCF) 3 of 4

TYPICAL X - SECTION OF ASHNI MR.
(OFFTAKE FROM RD - 4+240 KM., ANGRA BRANCH CANAL)
DESIGN SECTION FOR PARTLY CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 3.277 KM TO CH: 4.650 KM

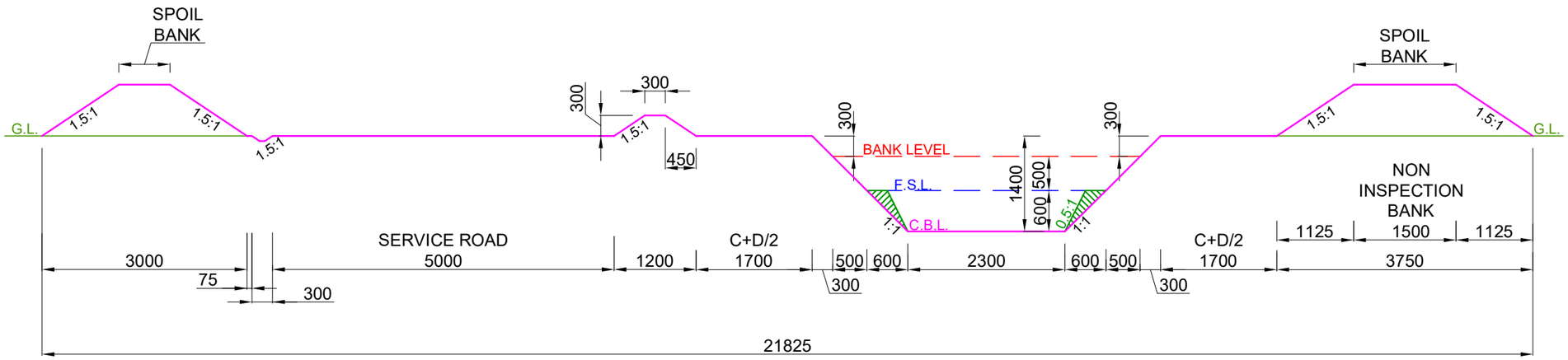
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATHRA MR. (OFFTAKE FROM RD -4+240 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-02/ XSEC /TYP-(PCF) 4 of 4

TYPICAL X - SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 0.000 KM TO CH: 2.027 KM

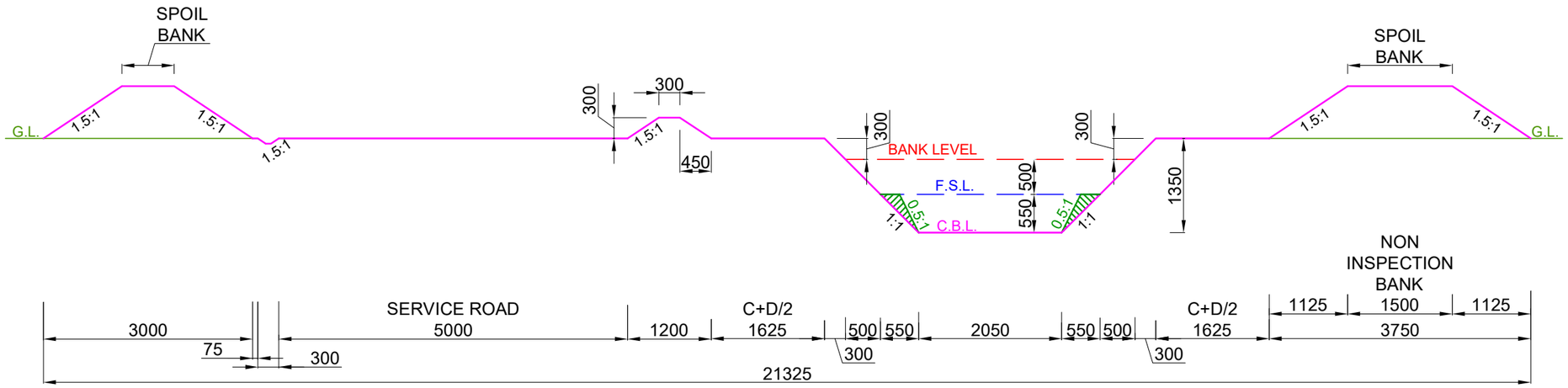
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF KAILASHPUR SUB DY. (OFFTAKE FROM RD -9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-04/ XSEC /TYP-(FC) 1 of 7

TYPICAL X - SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 2.027 KM TO CH: 3.500 KM

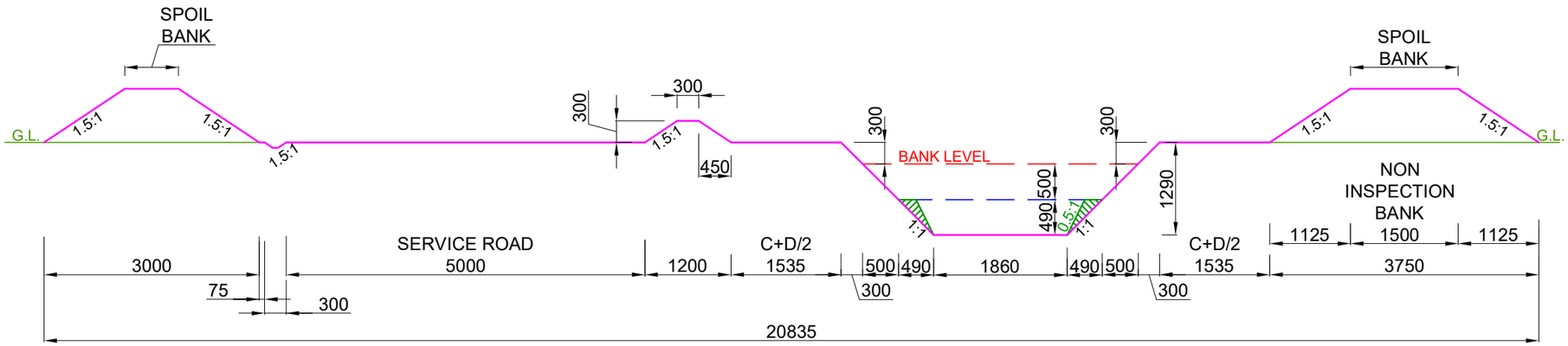
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF KAILASHPUR SUB DY. (OFFTAKE FROM RD -9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-04/ XSEC /TYP-(FC) 2 of 7

TYPICAL X - SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 3.500 KM TO CH: 4.350 KM

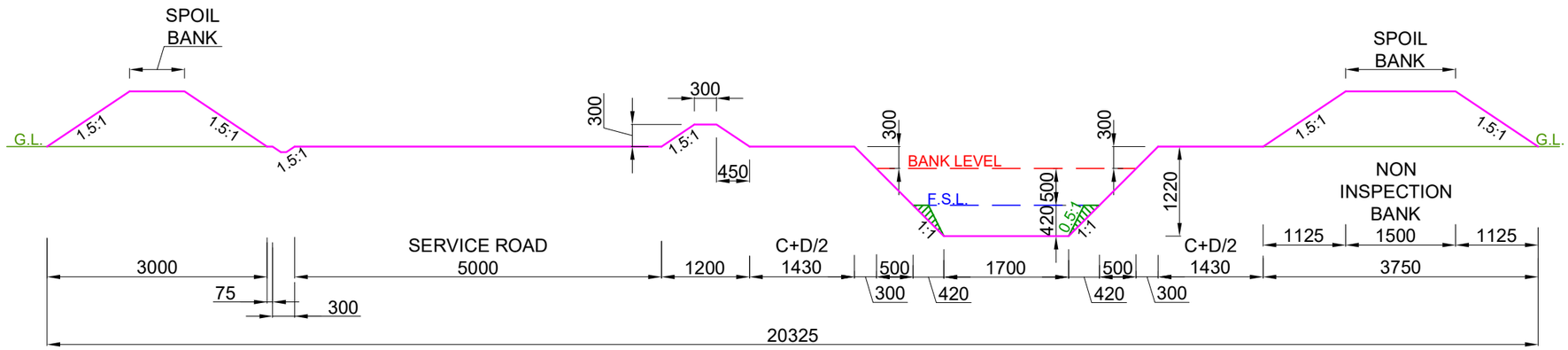
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF KAILASHPUR SUB DY. (OFFTAKE FROM RD -9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-04/ XSEC /TYP-(FC) 3 of 7

TYPICAL X - SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 4.350 KM TO CH: 5.050 KM

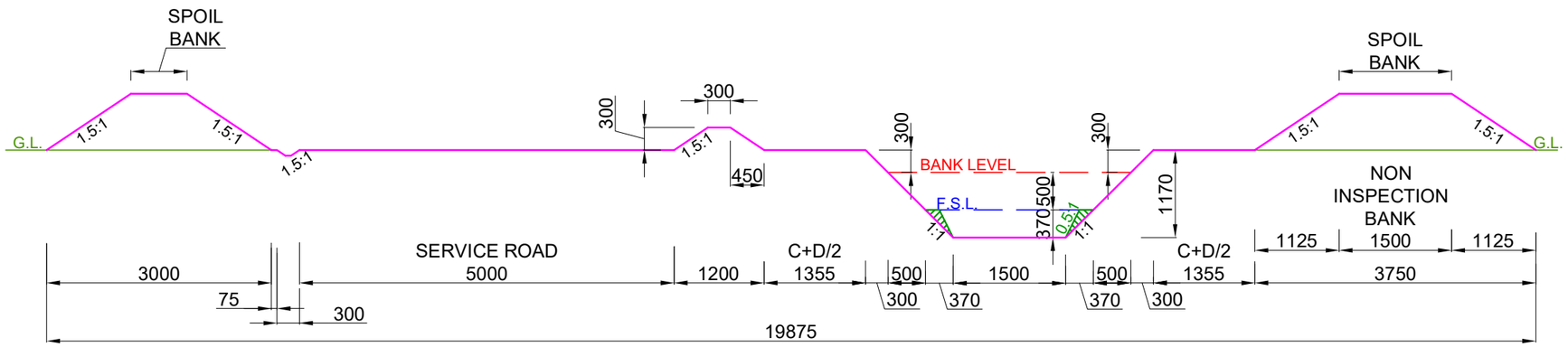
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF KAILASHPUR SUB DY. (OFFTAKE FROM RD -9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-04/ XSEC /TYP-(FC) 4 of 7

TYPICAL X - SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 5.050 KM TO CH: 5.669 KM

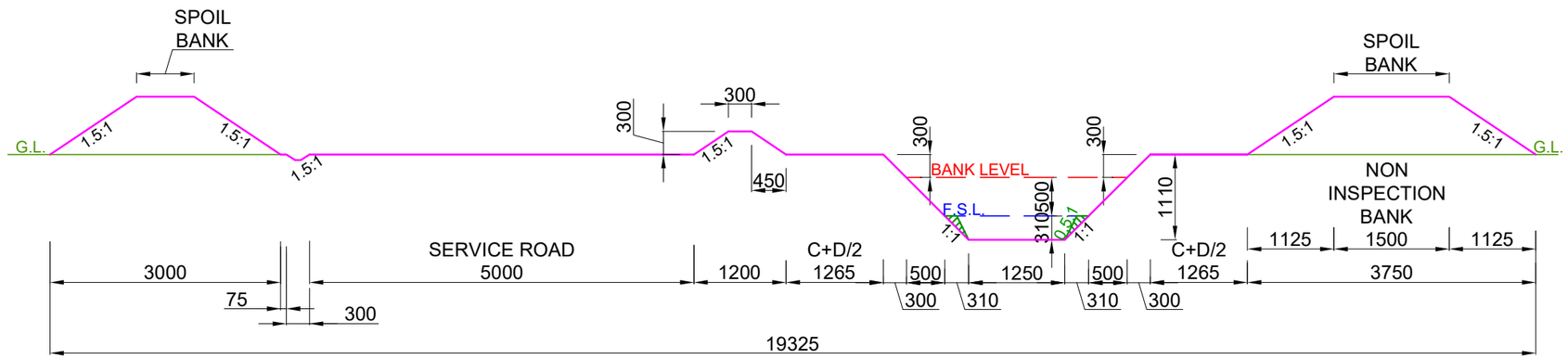
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF KAILASHPUR SUB DY. (OFFTAKE FROM RD -9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-04/ XSEC /TYP-(FC) 5 of 7

TYPICAL X - SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 5.669 KM TO CH: 6.300 KM

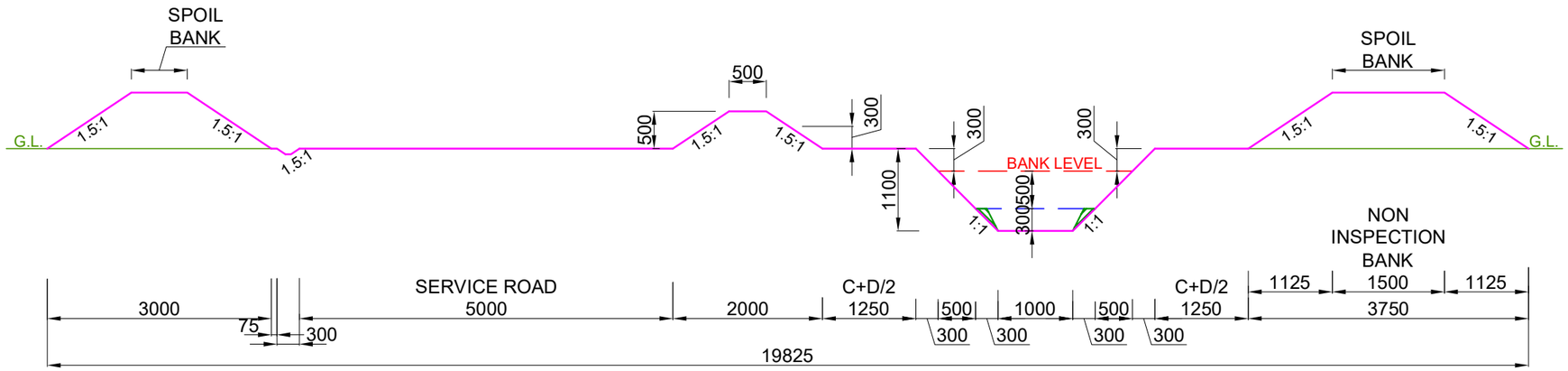
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF KAILASHPUR SUB DY. (OFFTAKE FROM RD -9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-04/ XSEC /TYP-(FC) 6 of 7

TYPICAL X - SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 6.300 KM TO CH: 7.550 KM

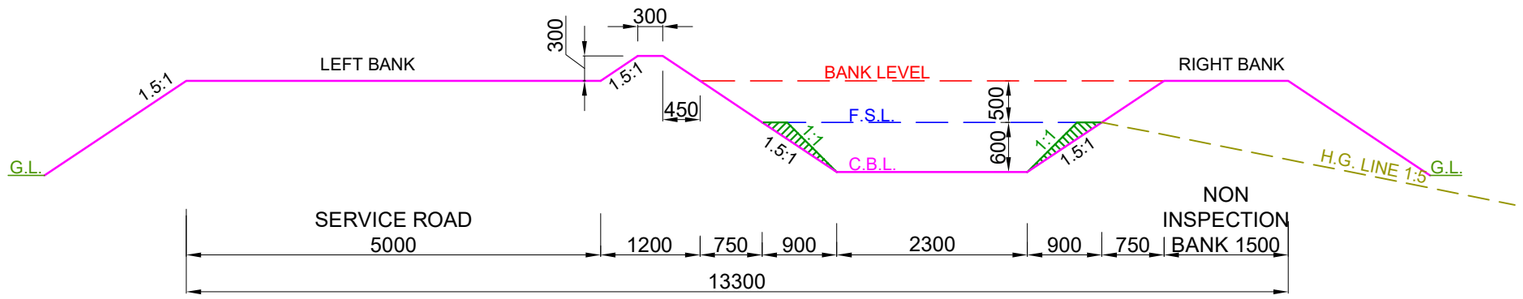
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF KAILASHPUR SUB DY. (OFFTAKE FROM RD -9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-04/ XSEC /TYP-(FC) 7 of 7

TYPICAL X - SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 0.000 KM TO CH: 2.027 KM

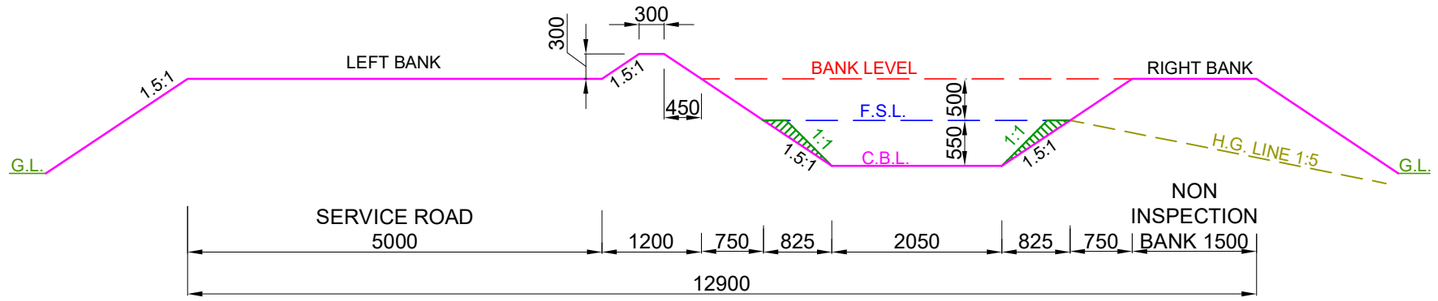
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF KAILASHPUR SUB DY. (OFFTAKE FROM RD -9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-04/ XSEC /TYP-(FF) 1 of 7

TYPICAL X - SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 2.027 KM TO CH: 3.500 KM

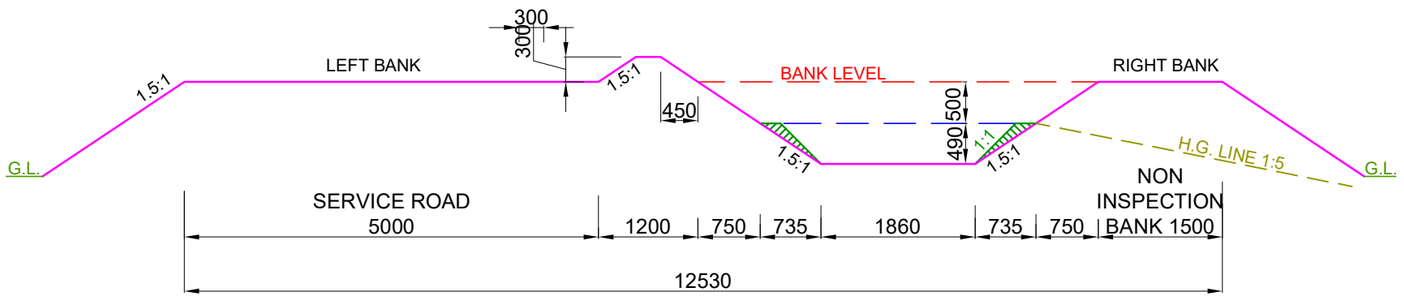
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF KAILASHPUR SUB DY. (OFFTAKE FROM RD -9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-04/ XSEC /TYP-(FF) 2 of 7

TYPICAL X - SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 3.500 KM TO CH: 4.350 KM

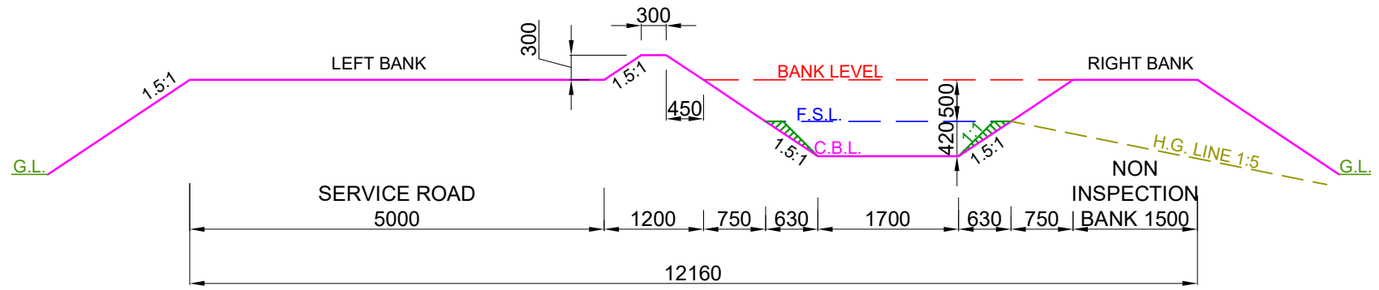
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF KAILASHPUR SUB DY. (OFFTAKE FROM RD -9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-04/ XSEC /TYP-(FF) 3 of 7

TYPICAL X - SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 4.350 KM TO CH: 5.050 KM

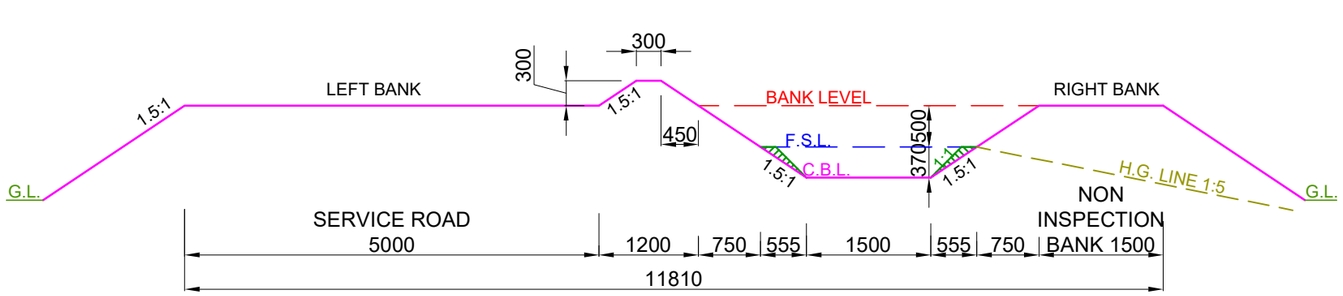
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF KAILASHPUR SUB DY. (OFFTAKE FROM RD -9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-04/ XSEC /TYP-(FF) 4 of 7

TYPICAL X - SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 5.050 KM TO CH: 5.669 KM

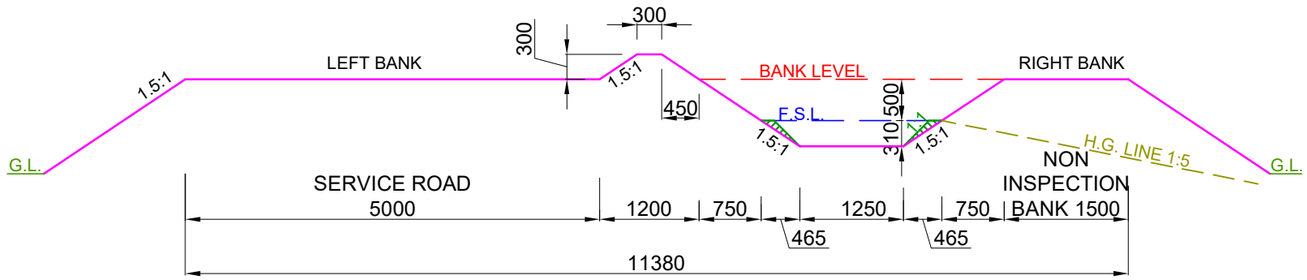
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF KAILASHPUR SUB DY. (OFFTAKE FROM RD -9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-04/ XSEC /TYP-(FF) 5 of 7

TYPICAL X - SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 5.669 KM TO CH: 6.300 KM

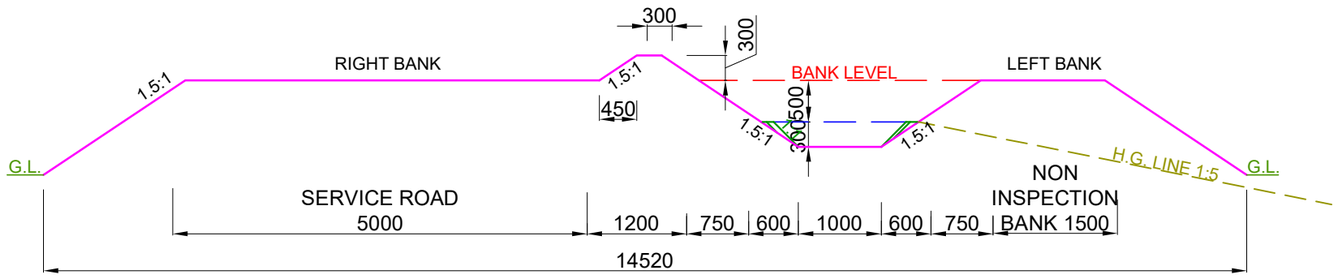
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF KAILASHPUR SUB DY. (OFFTAKE FROM RD -9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-04/ XSEC /TYP-(FF) 6 of 7

TYPICAL X - SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 6.300 KM TO CH: 7.550 KM

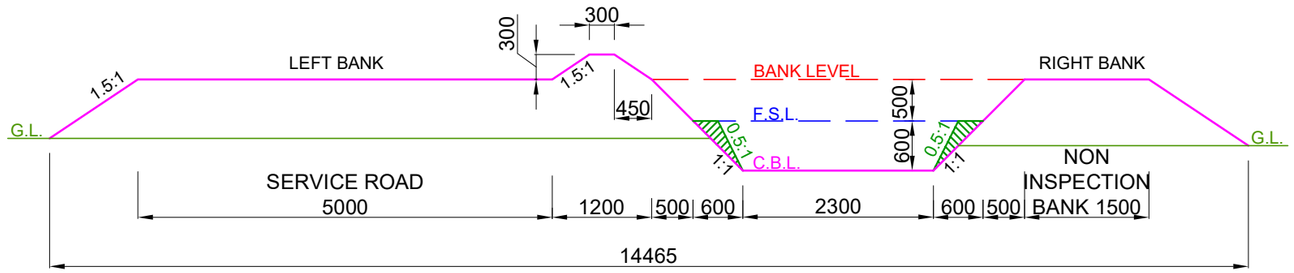
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF KAILASHPUR SUB DY. (OFFTAKE FROM RD -9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-04/ XSEC /TYP-(FF) 7 of 7

TYPICAL X - SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 0.000 KM TO CH: 2.027 KM

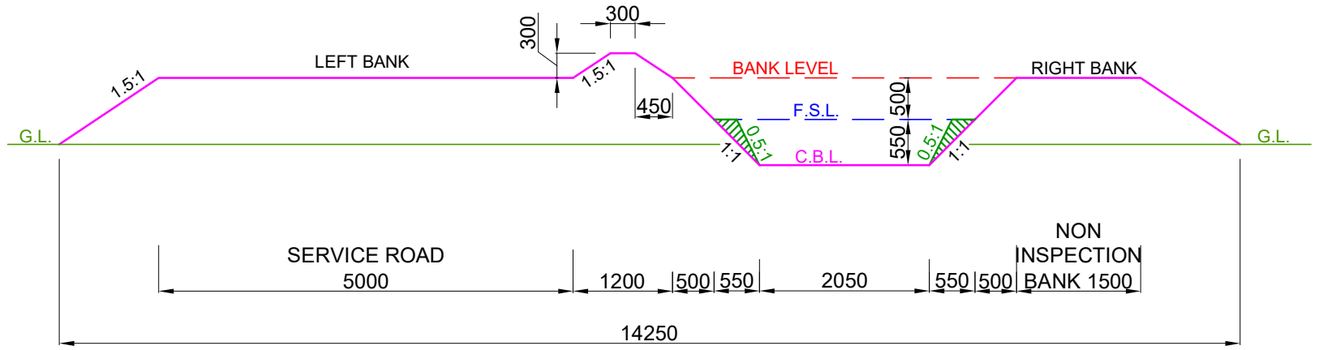
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF KAILASHPUR SUB DY. (OFFTAKE FROM RD -9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-04/ XSEC /TYP-(PCF) 1 of 7

TYPICAL X - SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 2.027 KM TO CH: 3.500 KM

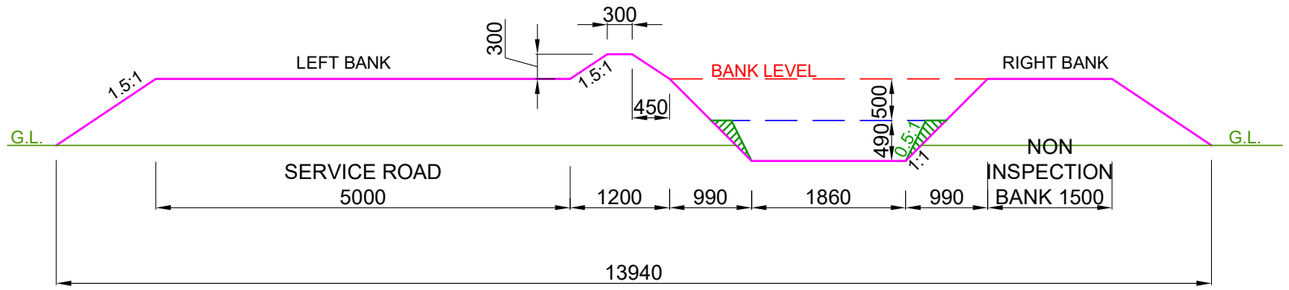
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF KAILASHPUR SUB DY. (OFFTAKE FROM RD -9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-04/ XSEC /TYP-(PCF) 2 of 7

TYPICAL X - SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 3.500 KM TO CH: 4.350 KM

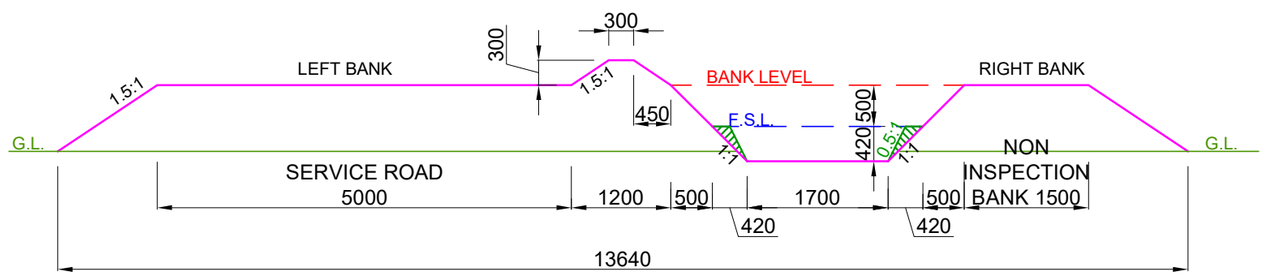
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF KAILASHPUR SUB DY. (OFFTAKE FROM RD -9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-04/ XSEC /TYP-(PCF) 3 of 7

TYPICAL X - SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 4.350 KM TO CH: 5.050 KM

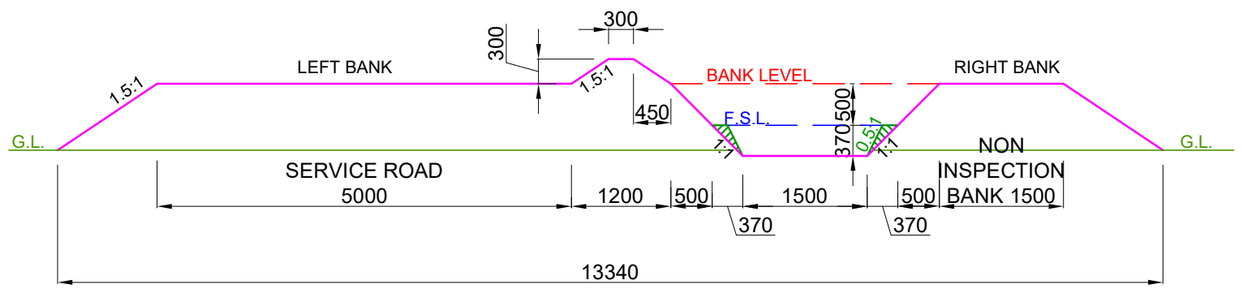
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF KAILASHPUR SUB DY. (OFFTAKE FROM RD -9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-04/ XSEC /TYP-(PCF) 4 of 7

TYPICAL X - SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 5.050 KM TO CH: 5.669 KM

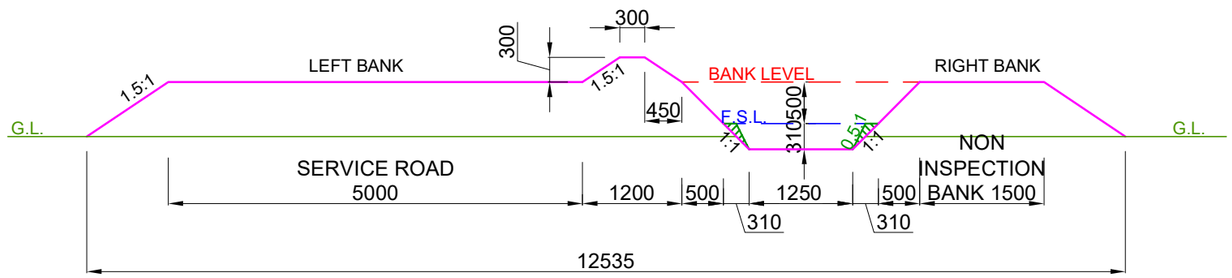
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF KAILASHPUR SUB DY. (OFFTAKE FROM RD -9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-04/ XSEC /TYP-(PCF) 5 of 7

TYPICAL X - SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 5.669 KM TO CH: 6.300 KM

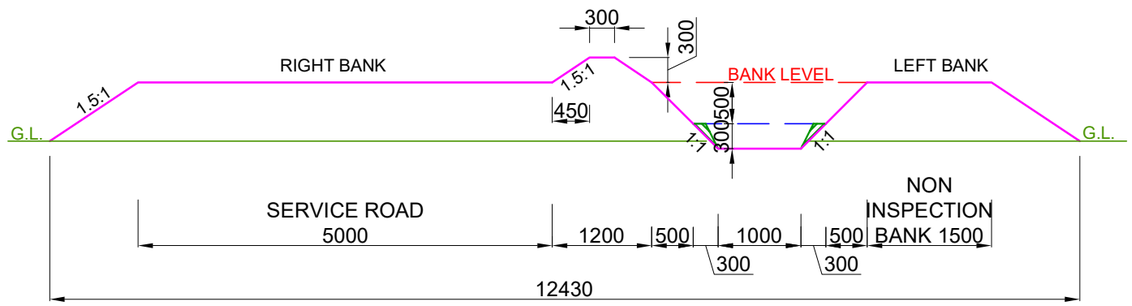
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF KAILASHPUR SUB DY. (OFFTAKE FROM RD -9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-04/ XSEC /TYP-(PCF) 6 of 7

TYPICAL X - SECTION OF KAILASHPUR SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 6.300 KM TO CH: 7.550 KM

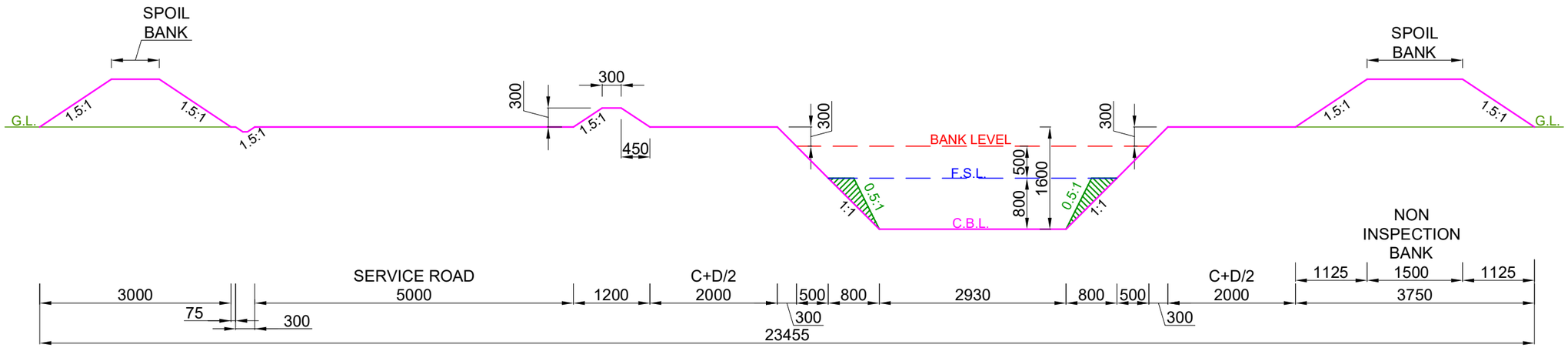
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF KAILASHPUR SUB DY. (OFFTAKE FROM RD -9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-04/ XSEC /TYP-(PCF) 7 of 7

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 0.000 KM TO CH: 4.816 KM

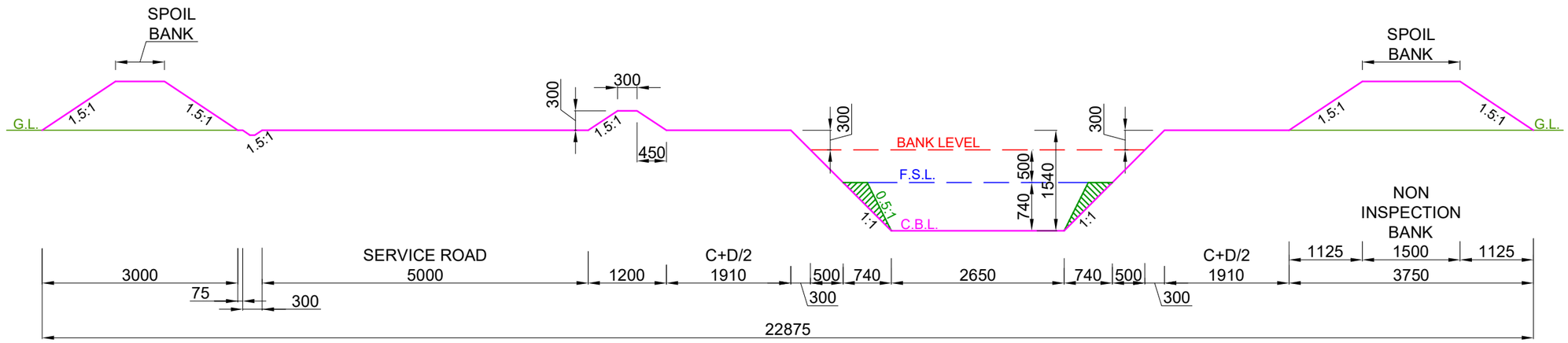
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(FC) 1 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 4.816 KM TO CH: 7.300 KM

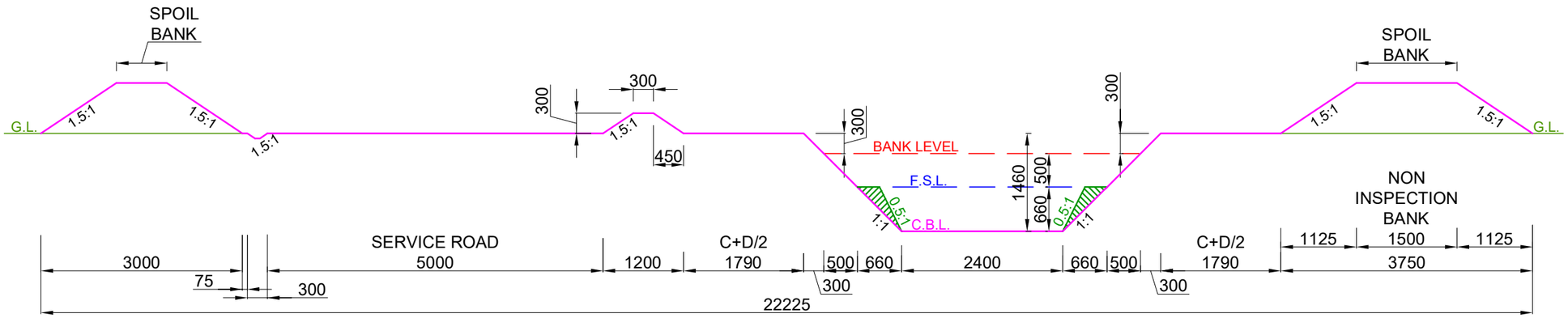
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(FC) 2 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 7.300 KM TO CH: 8.425 KM

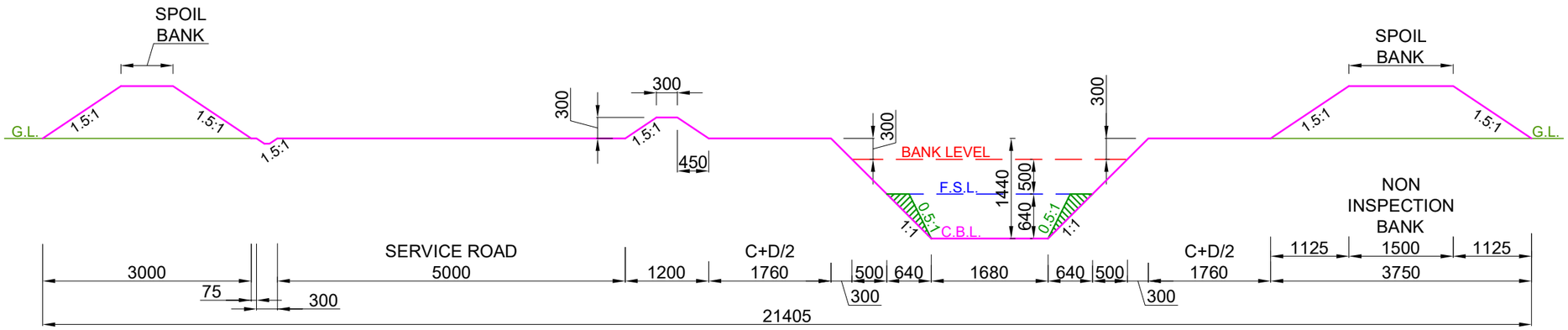
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(FC) 3 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 8.425 KM TO CH: 9.800 KM

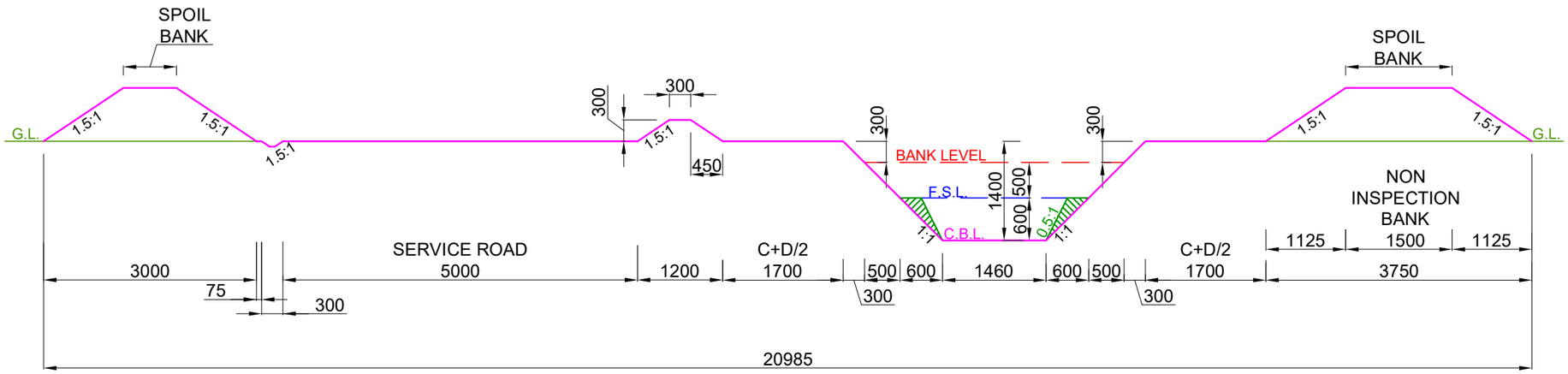
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(FC) 4 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 9.800 KM TO CH: 10.058 KM

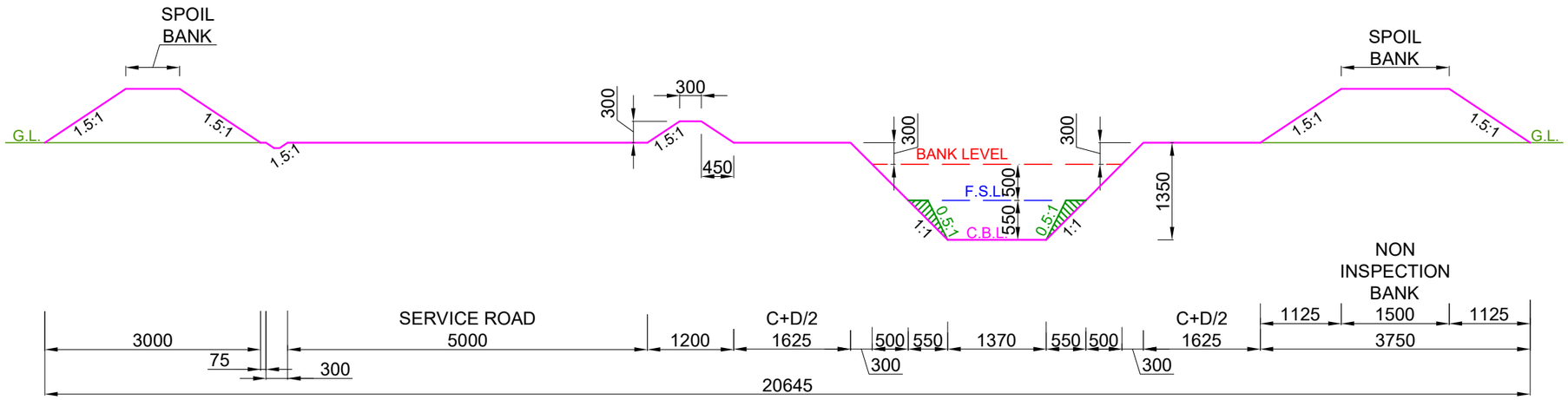
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(FC) 5 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 10.058 KM TO CH: 10.400 KM

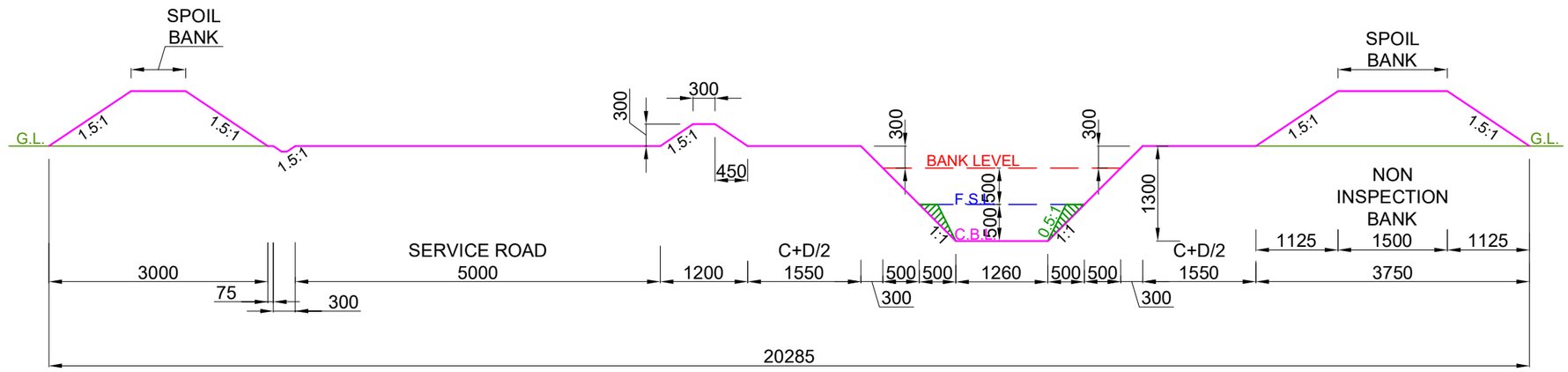
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(FC) 6 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 10.400 KM TO CH: 10.650 KM

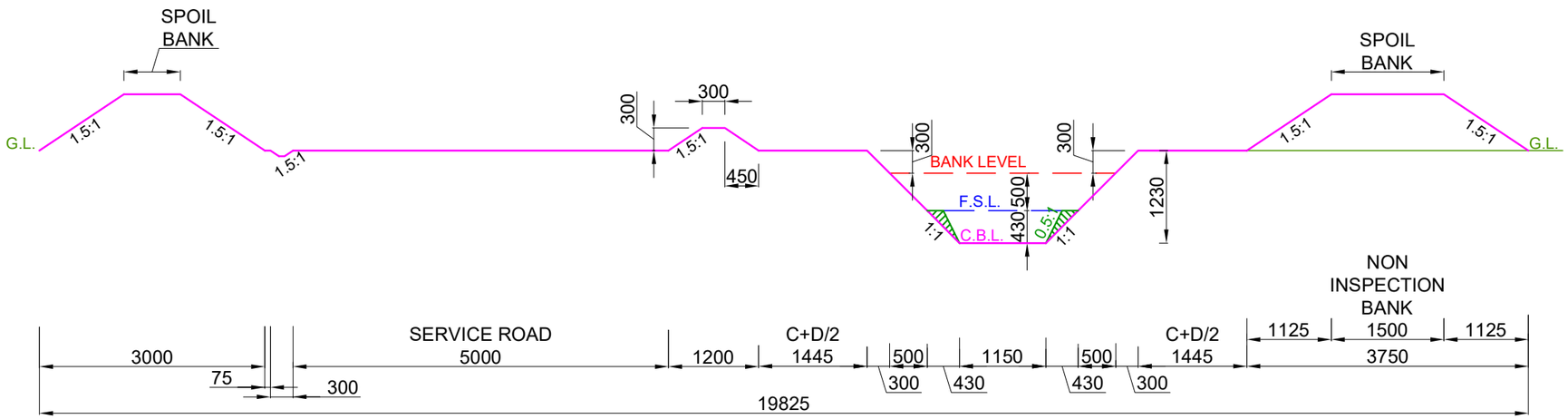
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(FC) 7 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 10.650 KM TO CH: 11.100 KM

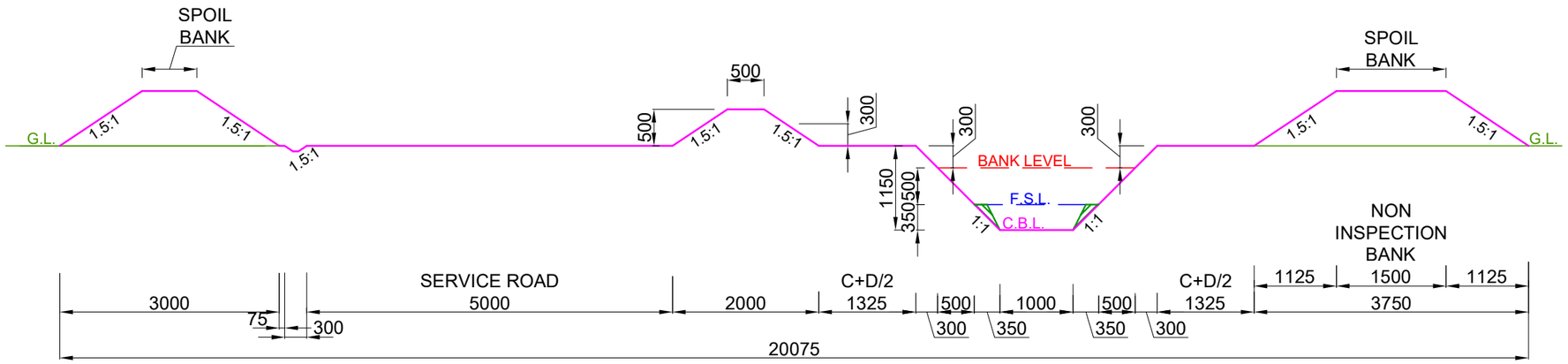
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(FC) 8 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 11.100 KM TO CH: 11.500 KM

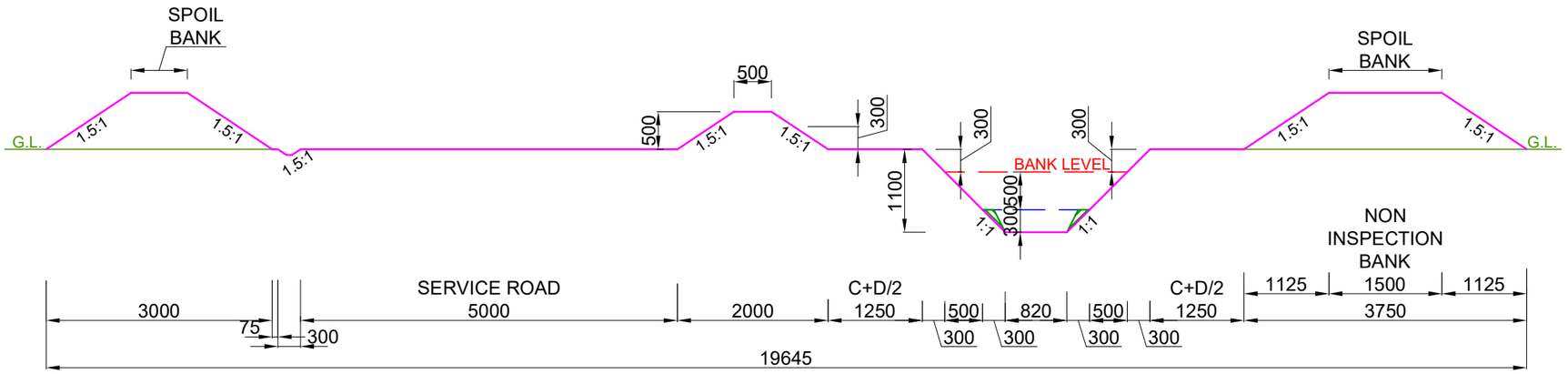
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(FC) 9 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 11.500 KM TO CH: 11.750 KM

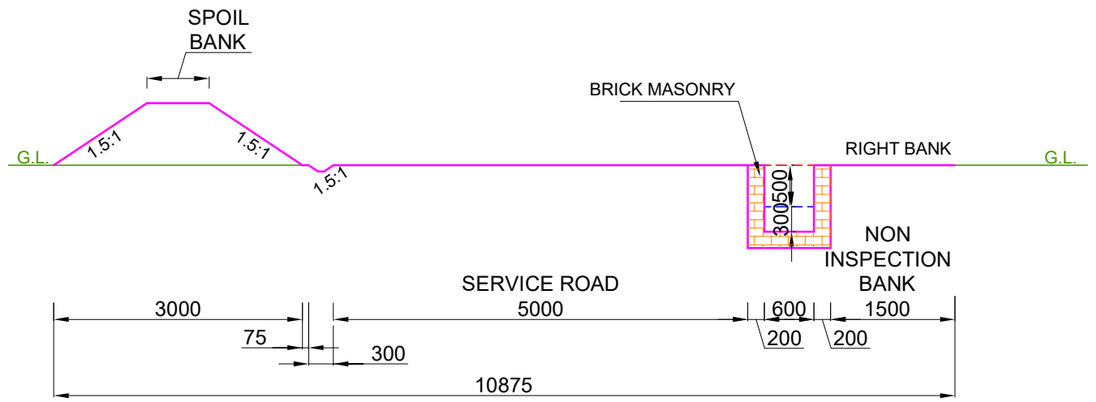
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(FC) 10 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 11.750 KM TO CH: 13.300 KM

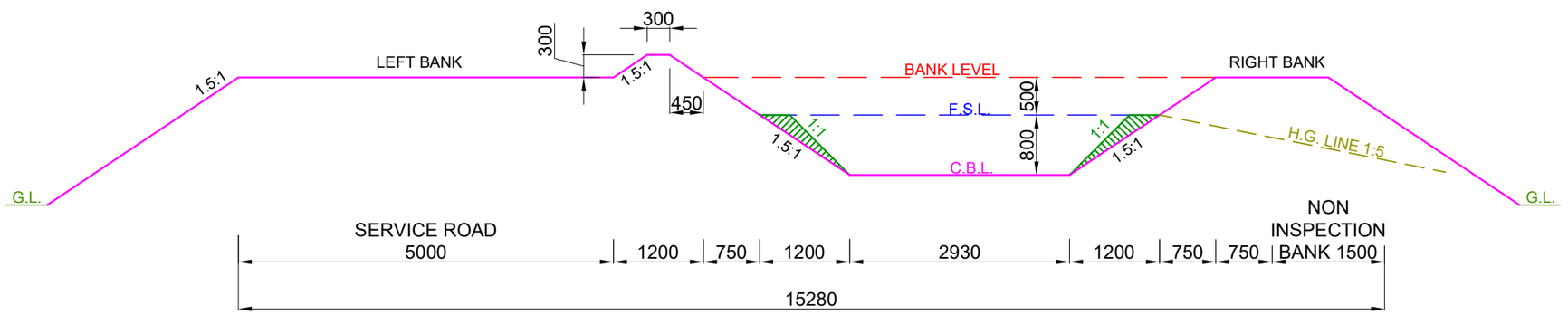
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(FC) 11 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 0.000 KM TO CH: 4.816 KM

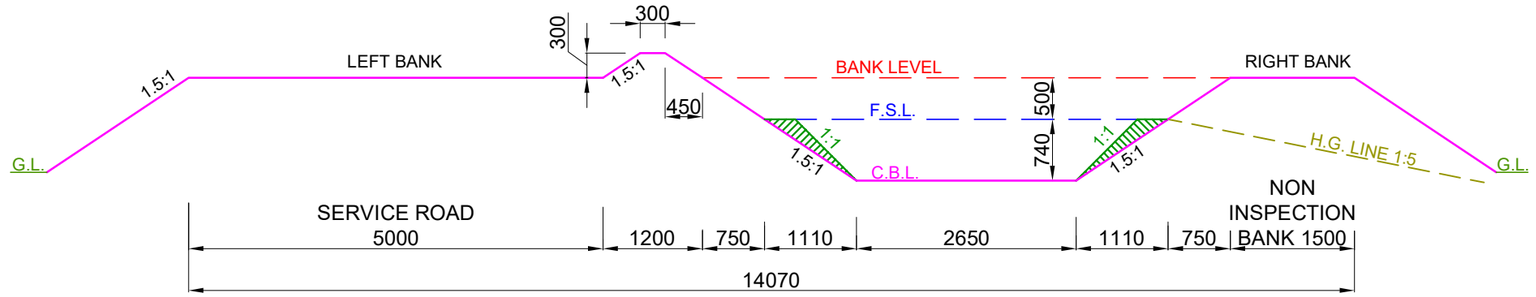
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(FF) 1 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 4.816 KM TO CH: 7.300 KM

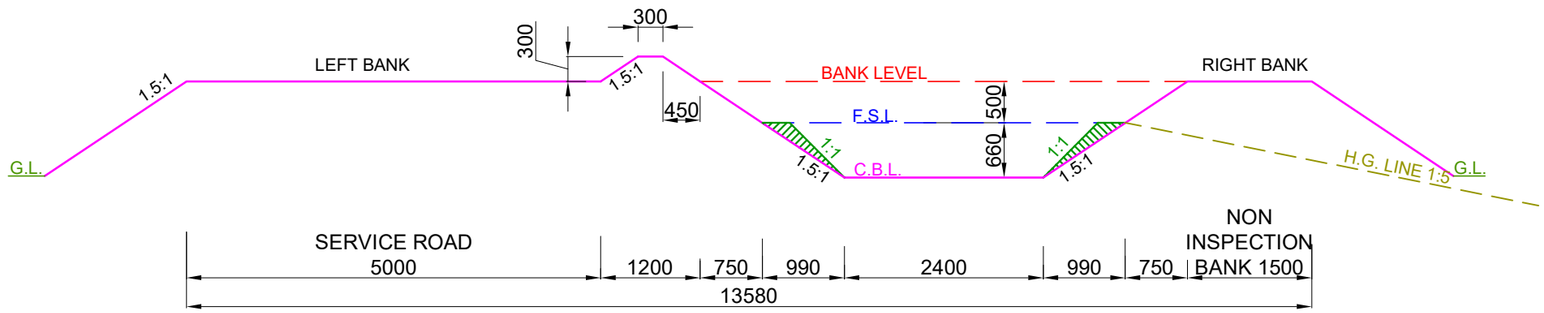
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(FF)

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 7.300 KM TO CH: 8.425 KM

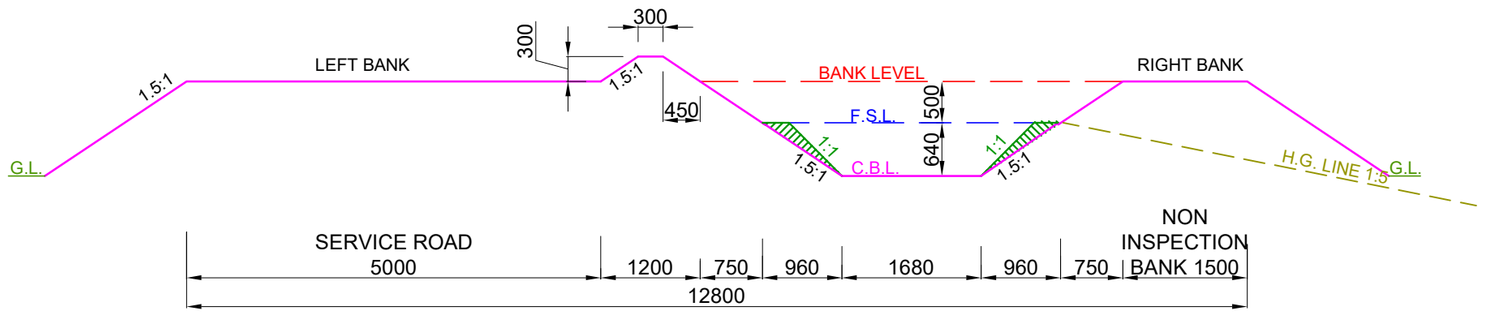
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(FF) 3 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 8.425 KM TO CH: 9.800 KM

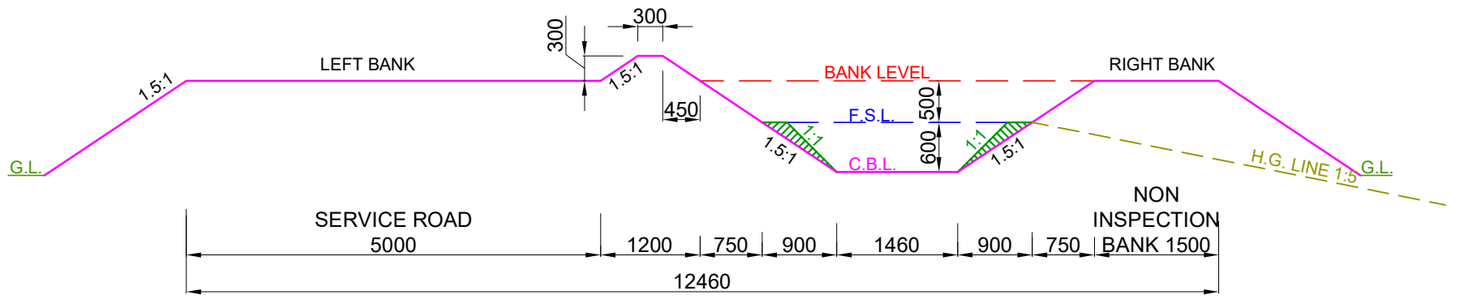
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(FF)

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 9.800 KM TO CH: 10.058 KM

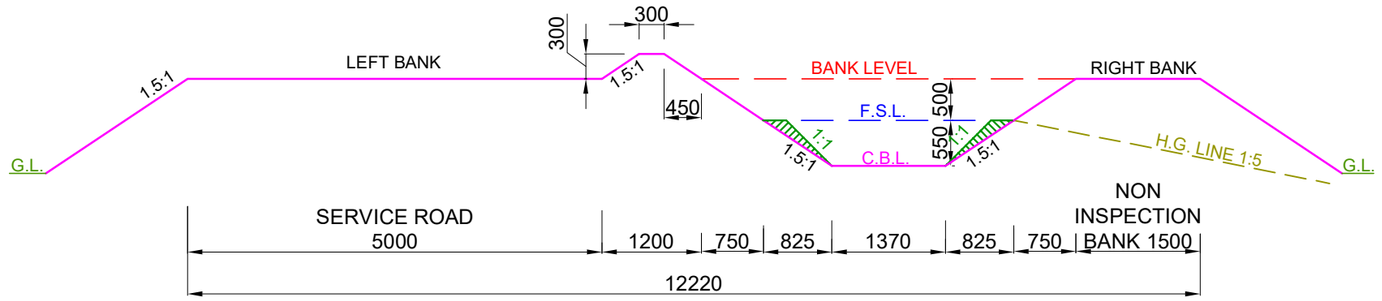
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(FF)

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 10.058 KM TO CH: 10.400 KM

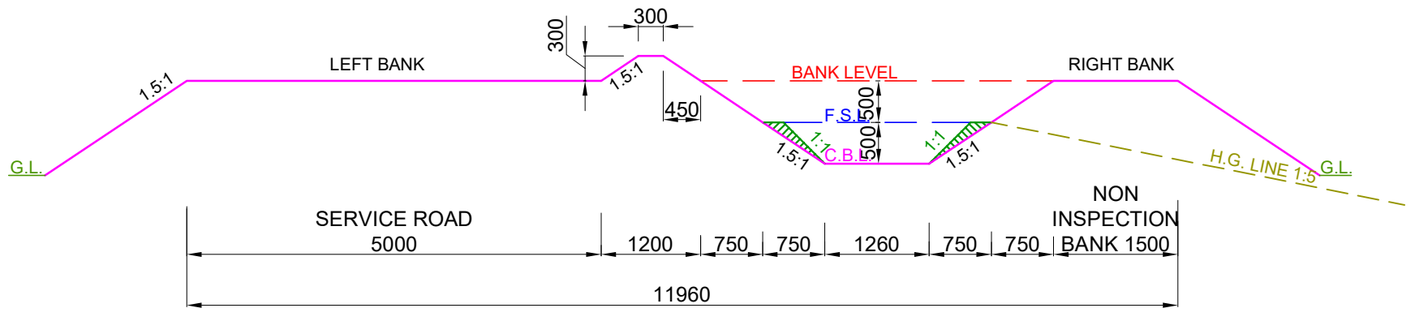
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(FF) 6 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 10.400 KM TO CH: 10.650 KM

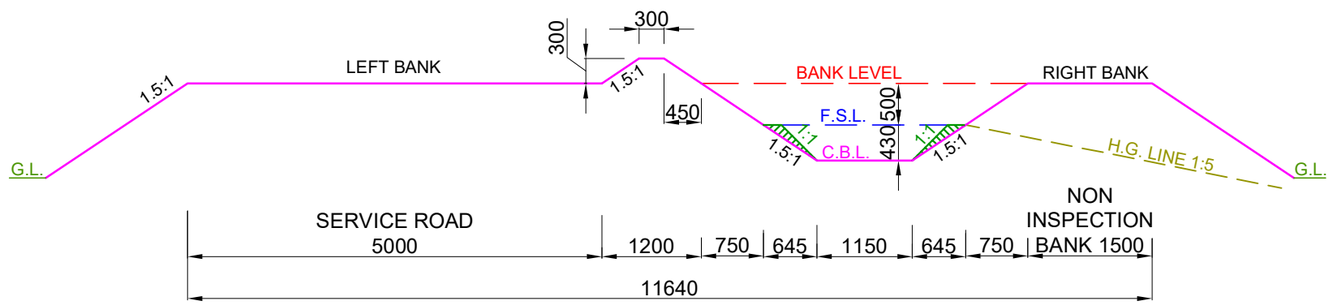
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(FF)

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 10.650 KM TO CH: 11.100 KM

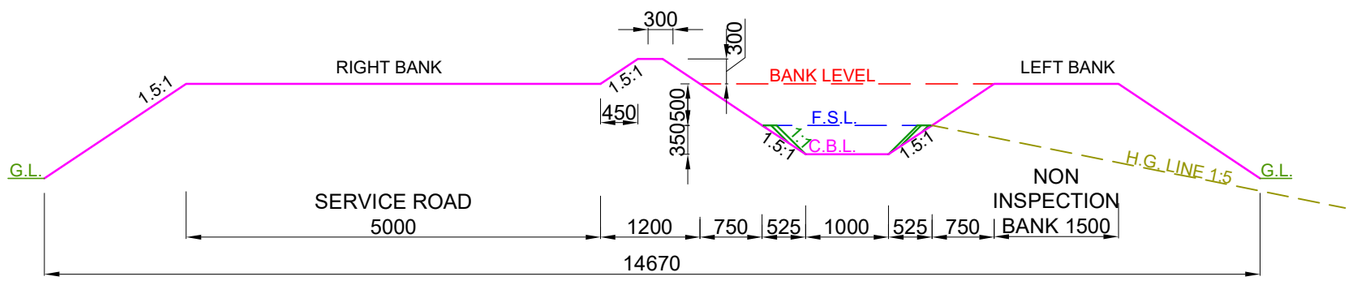
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(FF) 8 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 11.100 KM TO CH: 11.500 KM

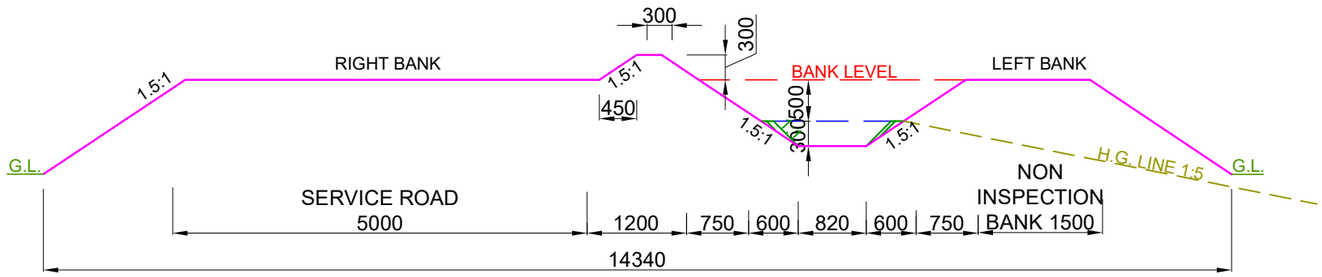
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(FF)

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 11.500 KM TO CH: 11.750 KM

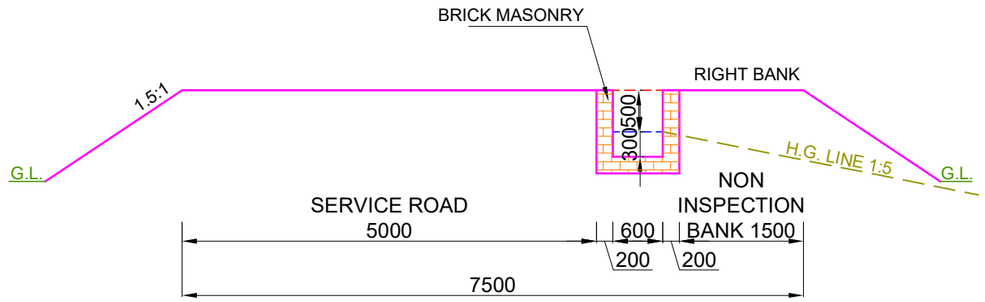
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(FF) 10 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 11.750 KM TO CH: 13.300 KM

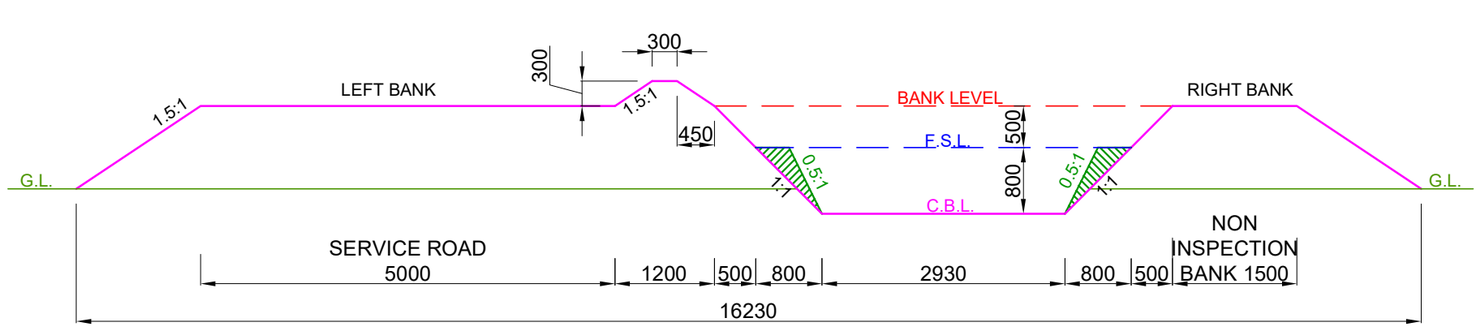
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(FF) 11 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 0.000 KM TO CH: 4.816 KM

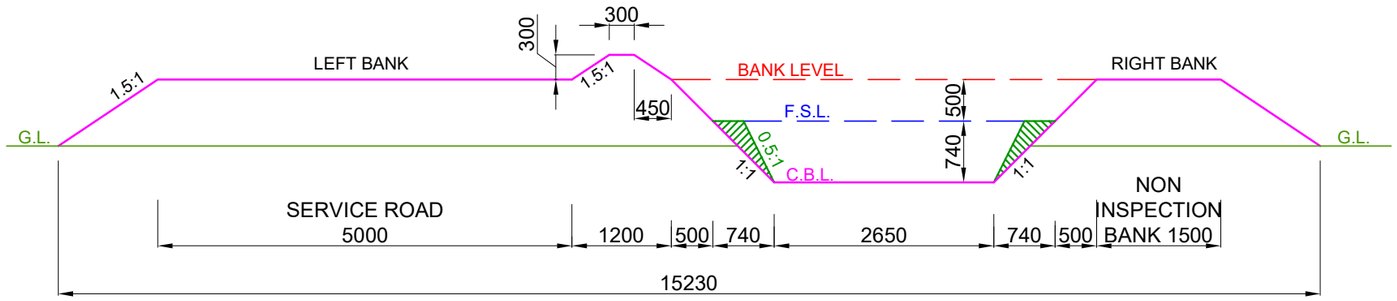
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(PCF) 1 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 4.816 KM TO CH: 7.300 KM

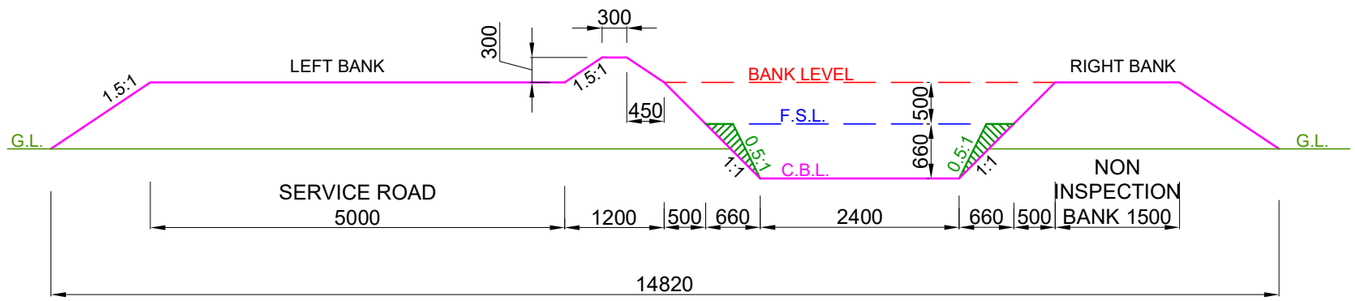
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(PCF) 2 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 7.300 KM TO CH: 8.425 KM

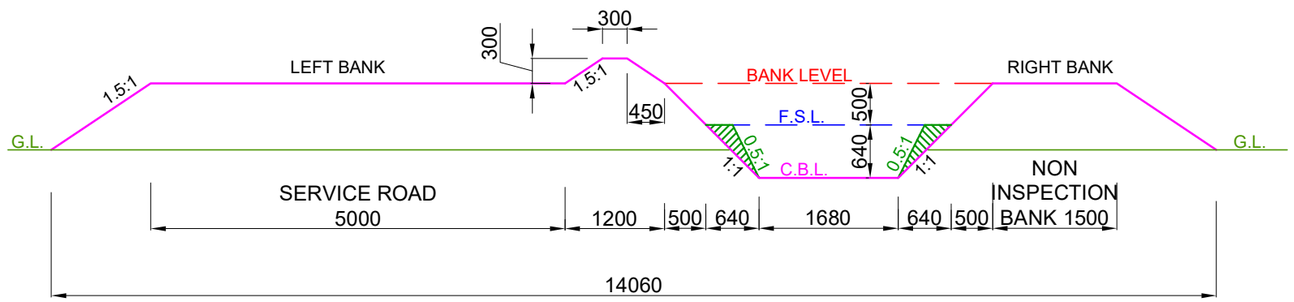
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(PCF) 3 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 8.425 KM TO CH: 9.800 KM

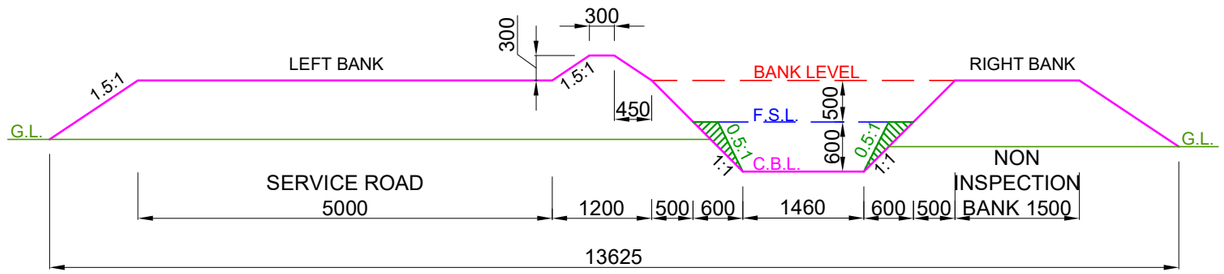
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(PCF) 4 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 9.800 KM TO CH: 10.058 KM

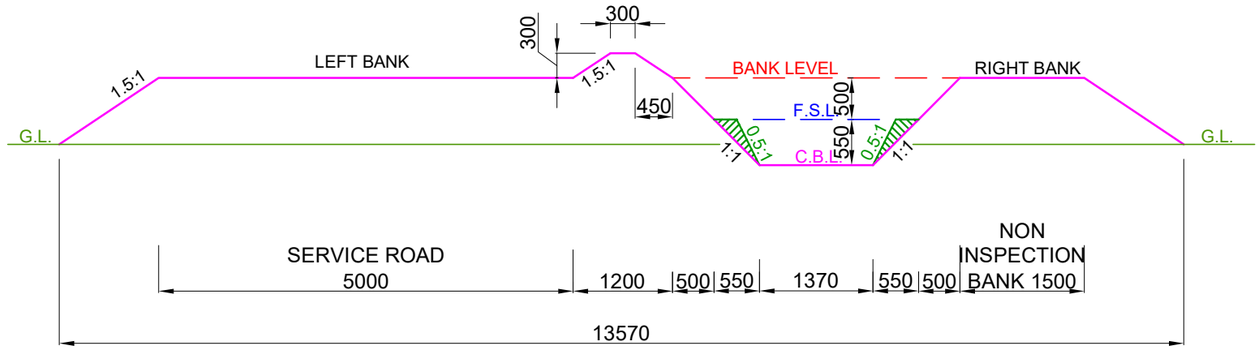
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(PCF) 5 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 10.058 KM TO CH: 10.400 KM

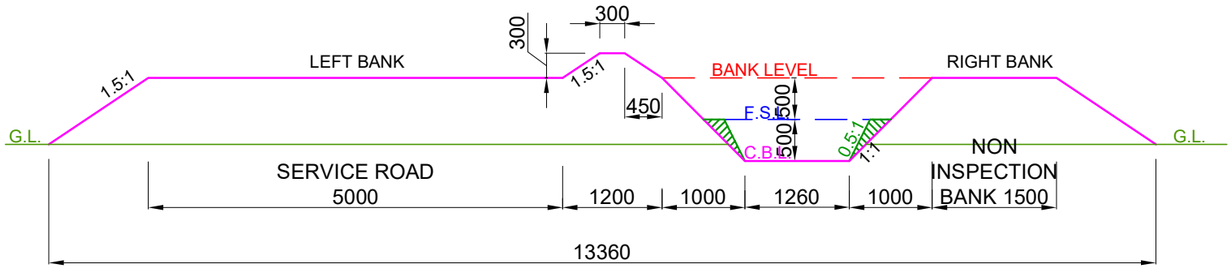
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(PCF) 6 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 10.400 KM TO CH: 10.650 KM

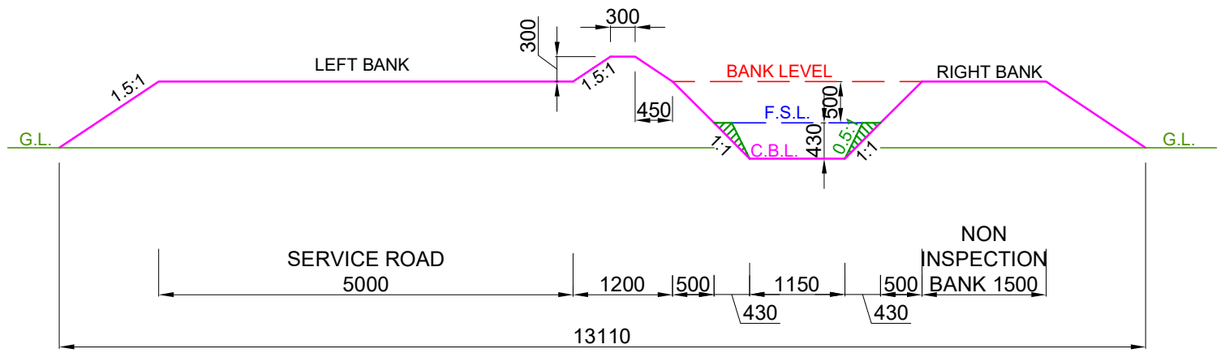
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(PCF) 7 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 10.650 KM TO CH: 11.100 KM

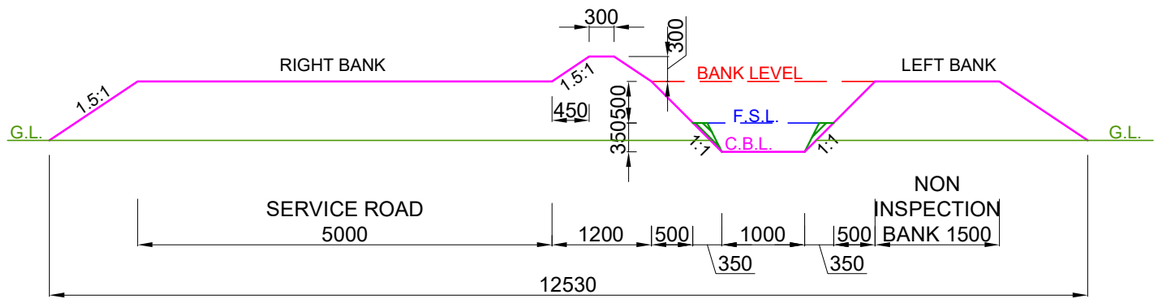
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(PCF) 8 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 11.100 KM TO CH: 11.500 KM

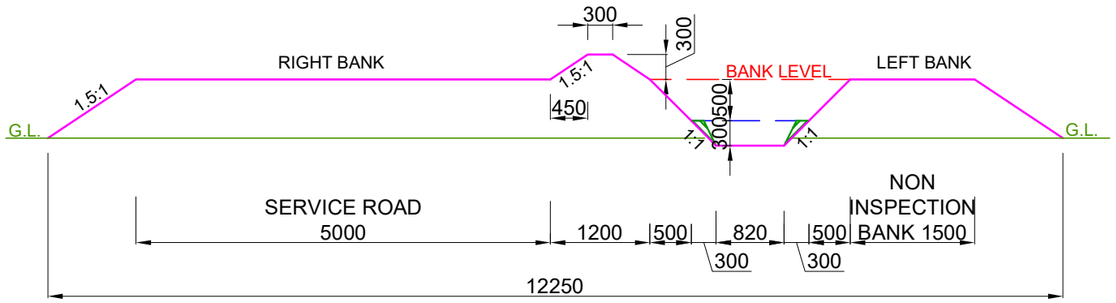
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(PCF) 9 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 11.500 KM TO CH: 11.750 KM

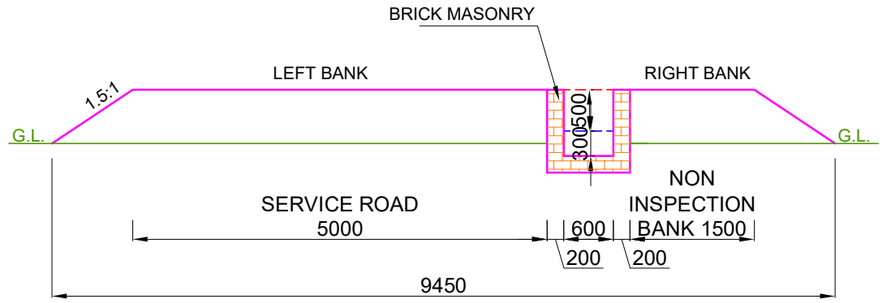
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(PCF) 10 of 11

TYPICAL X - SECTION OF BUDHAUL SUB DY.
(OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 11.750 KM TO CH: 13.300 KM

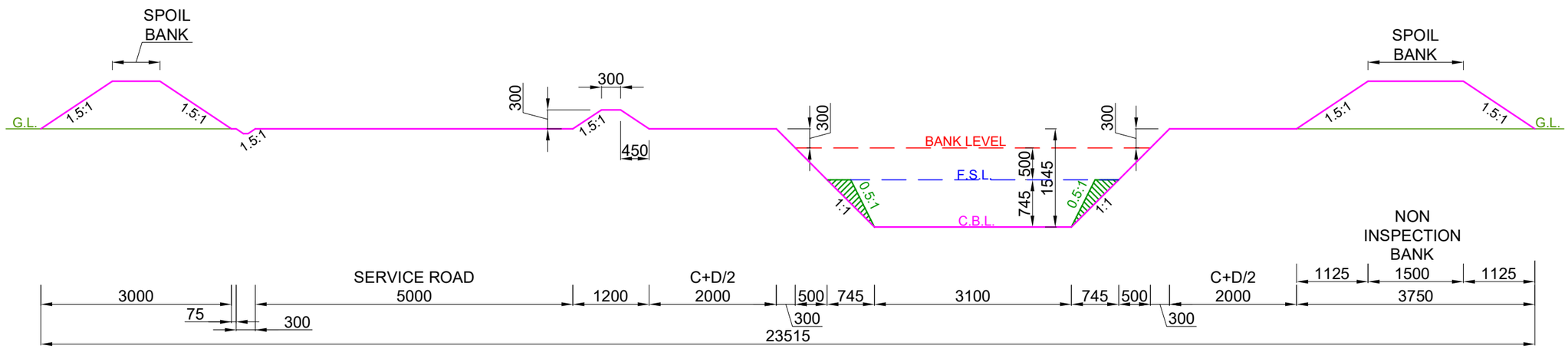
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF BUDHAUL SUB DY. (OFFTAKE FROM RD - 9+050 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-03/ XSEC /TYP-(PCF) 11 of 11

TYPICAL X - SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 0.000 KM TO CH: 4.350 KM

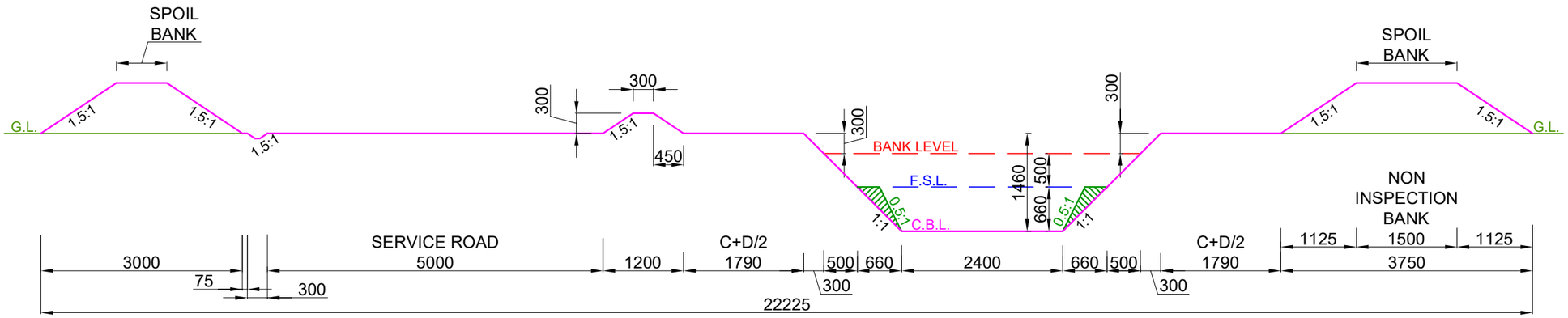
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ XSEC /TYP-(FC) 1 of 8

TYPICAL X - SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 4.350 KM TO CH: 7.000 KM

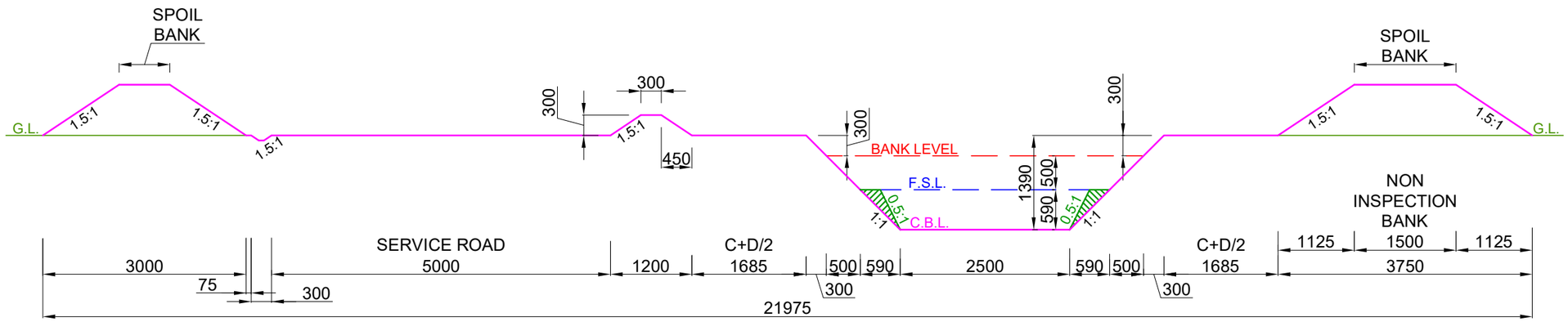
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
CUT AREA			Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
FILL AREA			Drawing Title :-	X - SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ XSEC /TYP-(FC) 2 of 8

TYPICAL X - SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 7.000 KM TO CH: 8.600 KM

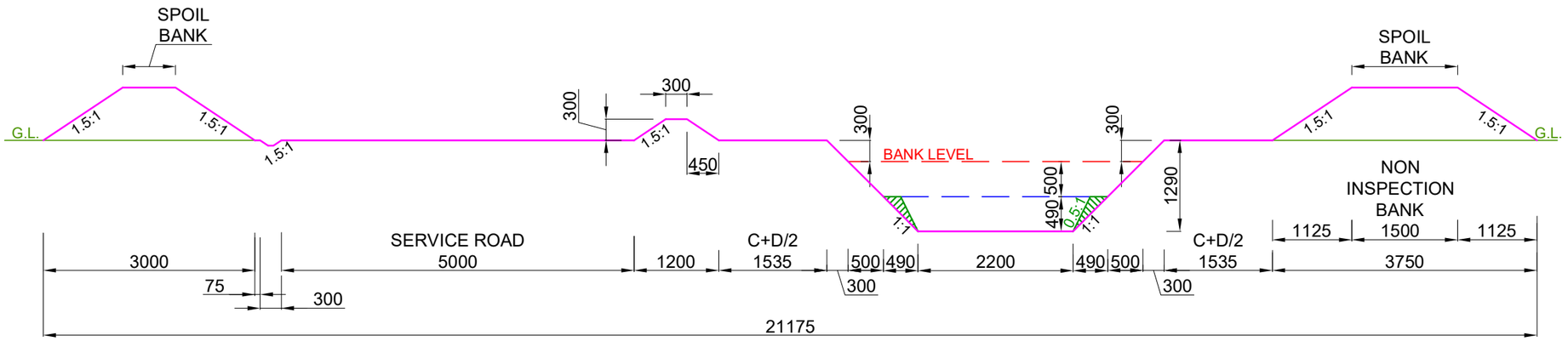
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ XSEC /TYP-(FC) 3 of 8

TYPICAL X - SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 8.600 KM TO CH: 9.900 KM

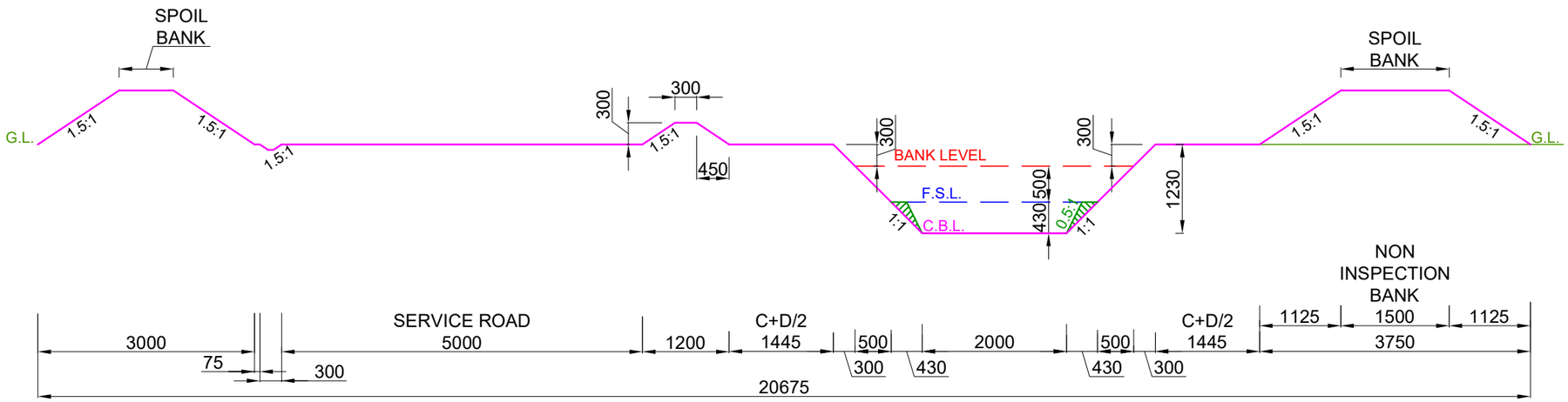
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ XSEC /TYP-(FC) 4 of 8

TYPICAL X - SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 9.900 KM TO CH: 10.550 KM

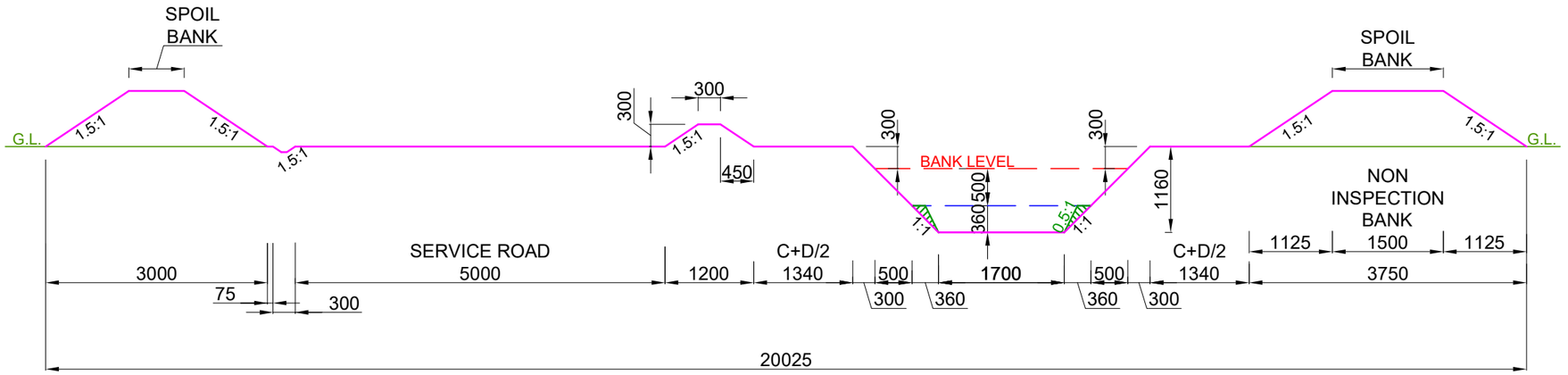
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ XSEC /TYP-(FC) 5 of 8

TYPICAL X - SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 10.550 KM TO CH: 11.100 KM

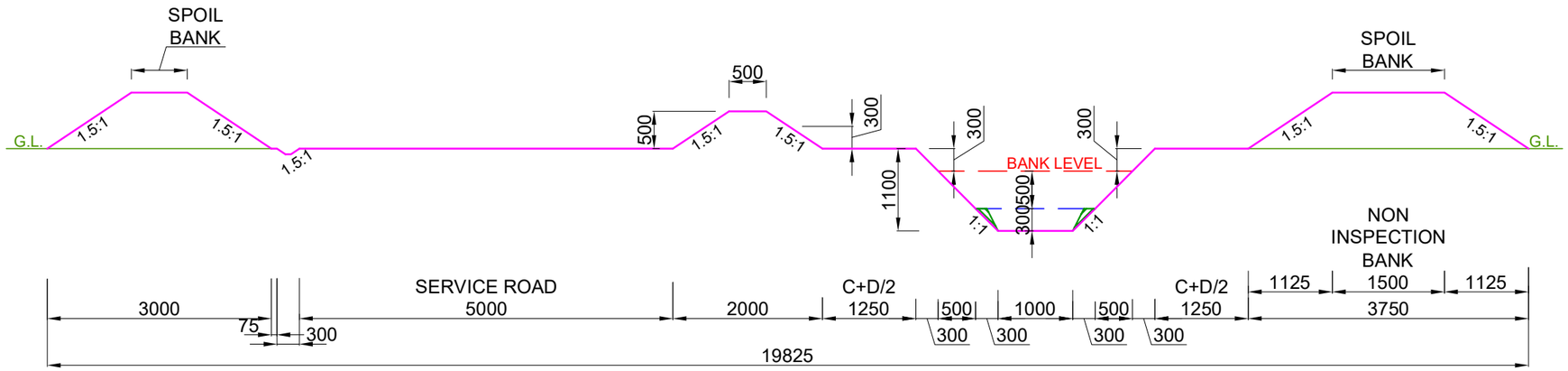
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ XSEC /TYP-(FC) 6 of 8

TYPICAL X - SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 11.100 KM TO CH: 11.500 KM

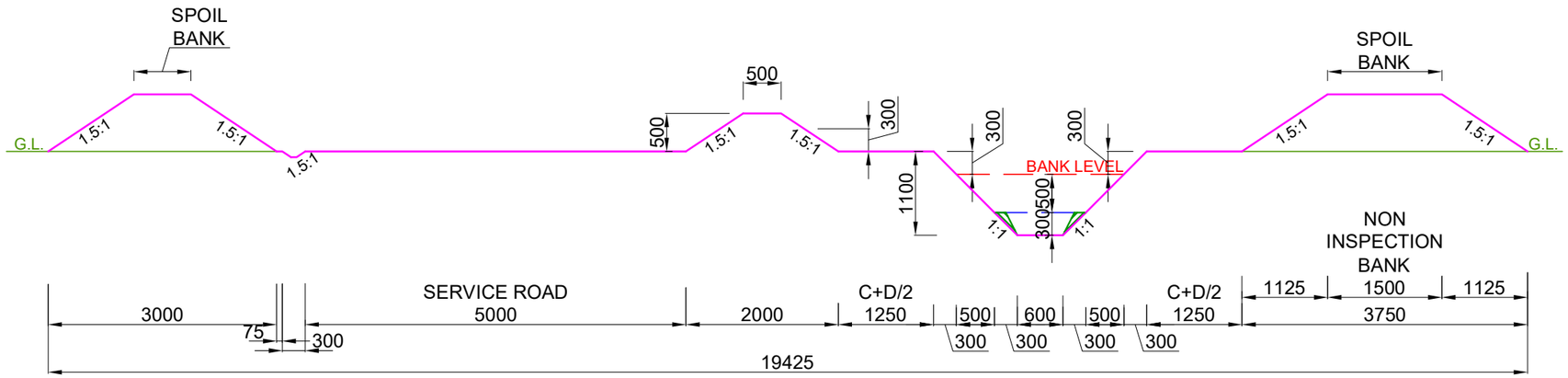
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ XSEC /TYP-(FC) 7 of 8

TYPICAL X - SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 11.500 KM TO CH: 12.000 KM

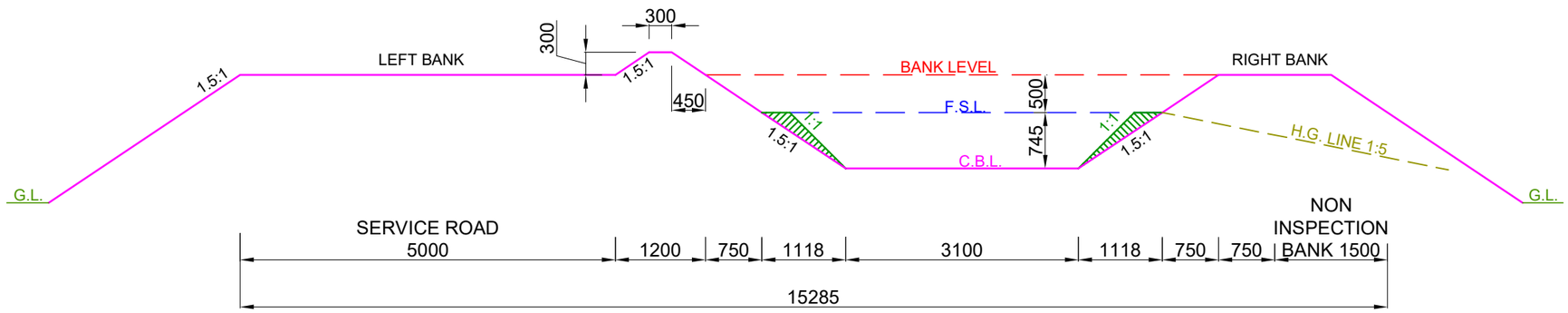
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ XSEC /TYP-(FC) 8 of 8

TYPICAL X - SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 0.000 KM TO CH: 4.350 KM

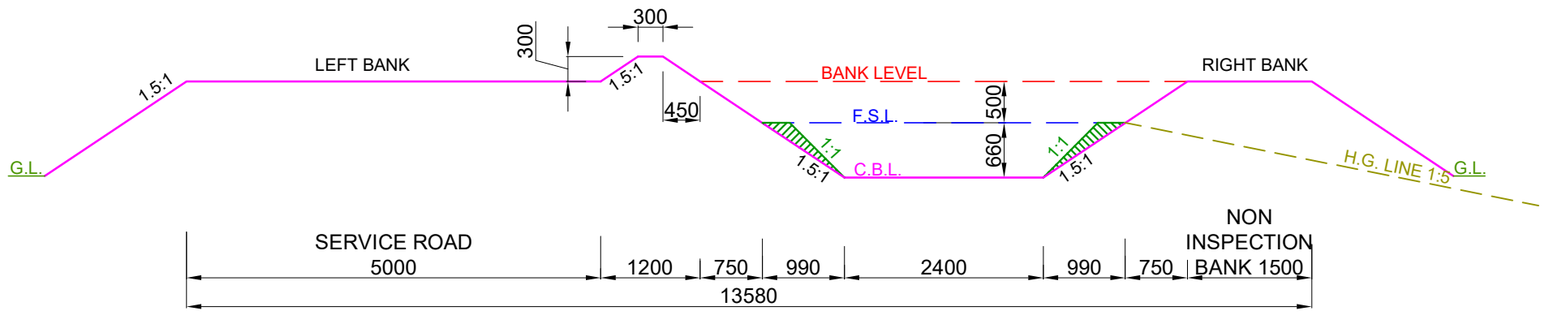
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ XSEC /TYP-(FF) 1 of 8

TYPICAL X - SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 4.350 KM TO CH: 7.000 KM

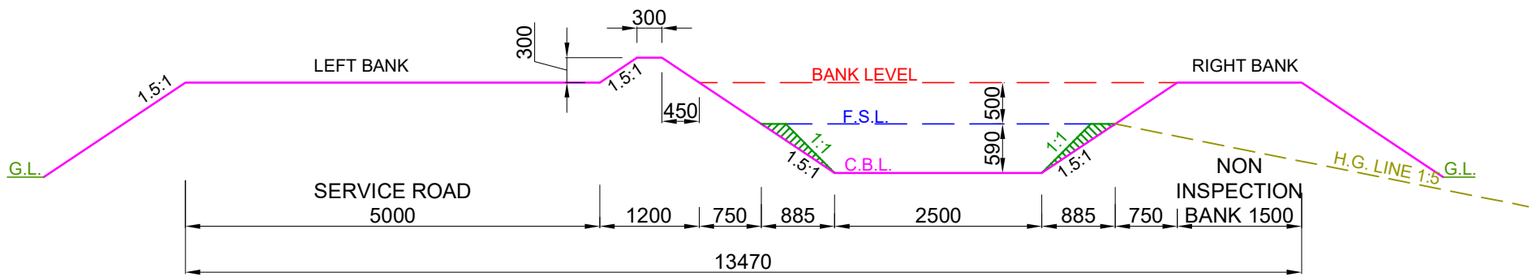
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ XSEC /TYP-(FF) 2 of 8

TYPICAL X - SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 7.000 KM TO CH: 8.600 KM

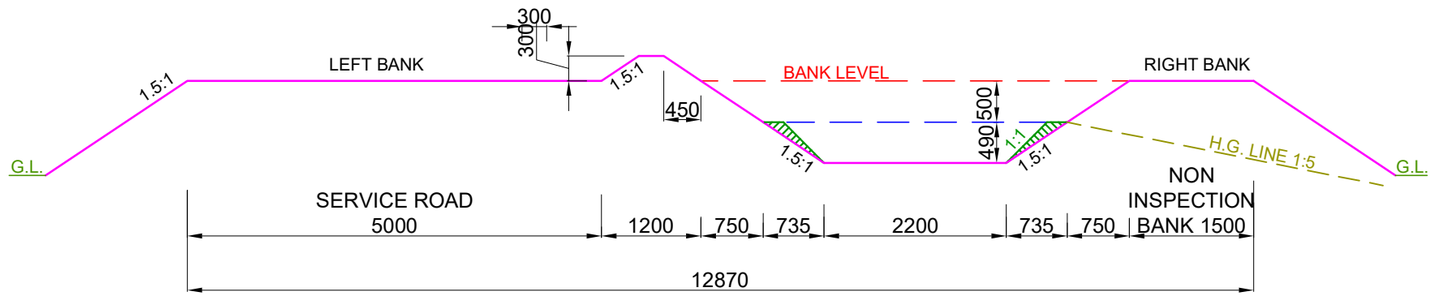
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ XSEC /TYP-(FF) 3 of 8

TYPICAL X - SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 8.600 KM TO CH: 9.900 KM

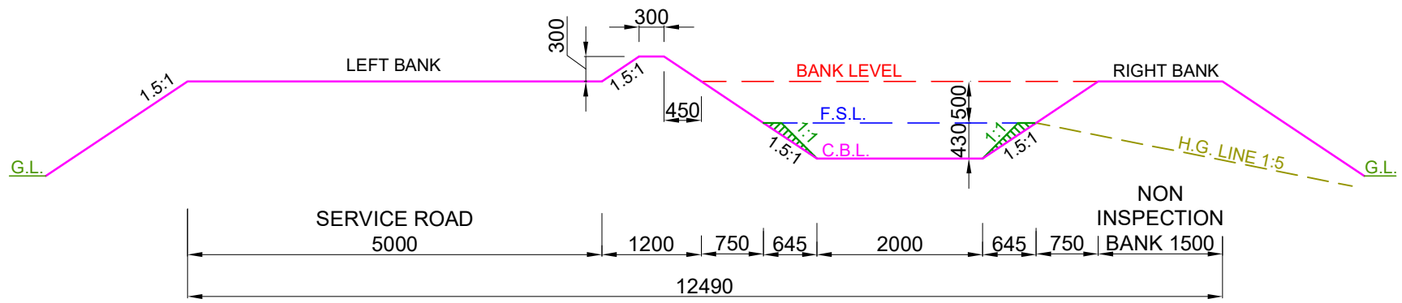
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ XSEC /TYP-(FF) 4 of 8

TYPICAL X - SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 9.900 KM TO CH: 10.550 KM

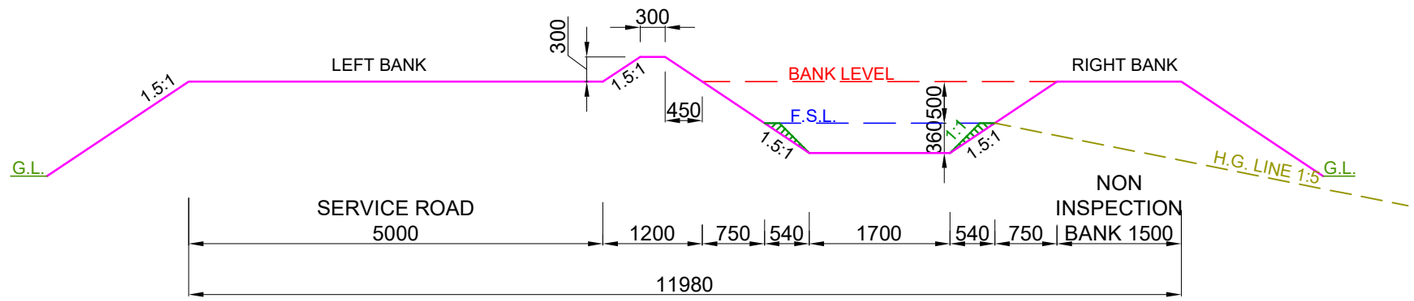
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ XSEC /TYP-(FF) 5 of 8

TYPICAL X - SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 10.550 KM TO CH: 11.100 KM

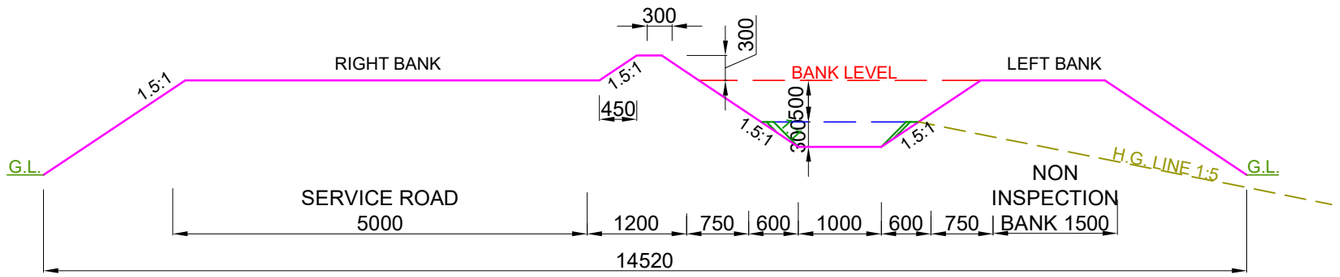
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ XSEC /TYP-(FF) 6 of 8

TYPICAL X - SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 11.100 KM TO CH: 11.500 KM

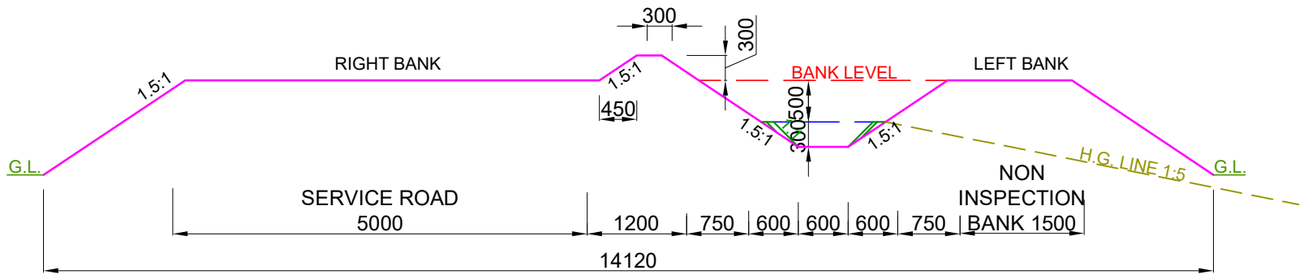
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ XSEC /TYP-(FF) 7 of 8

TYPICAL X - SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 11.500 KM TO CH: 12.000 KM

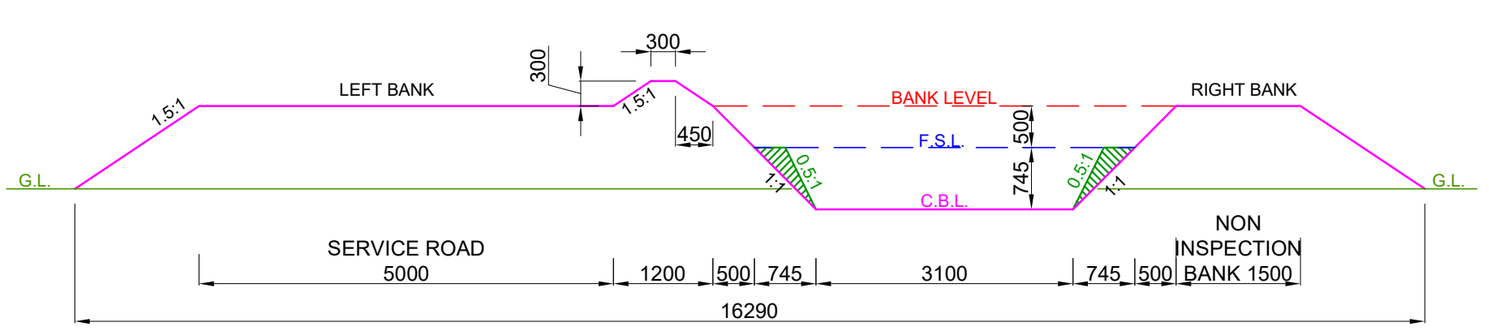
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ XSEC /TYP-(FF) 8 of 8

TYPICAL X - SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 0.000 KM TO CH: 4.350 KM

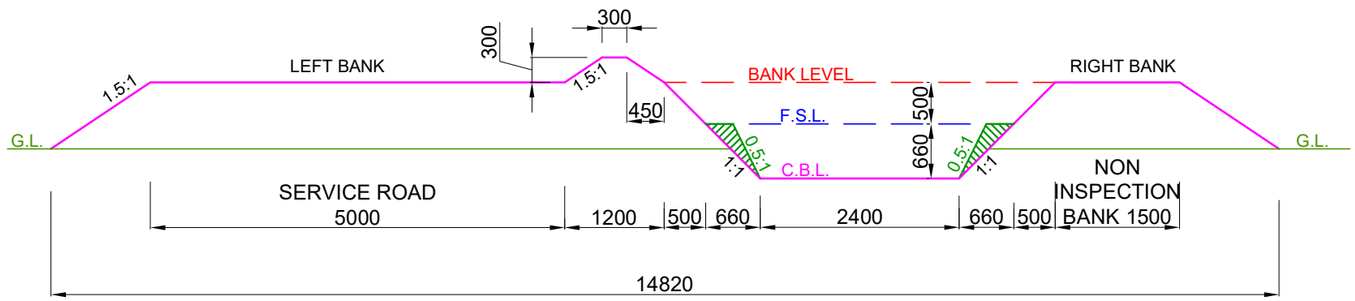
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ XSEC /TYP-(PCF) 1 of 8

TYPICAL X - SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 4.350 KM TO CH: 7.000 KM

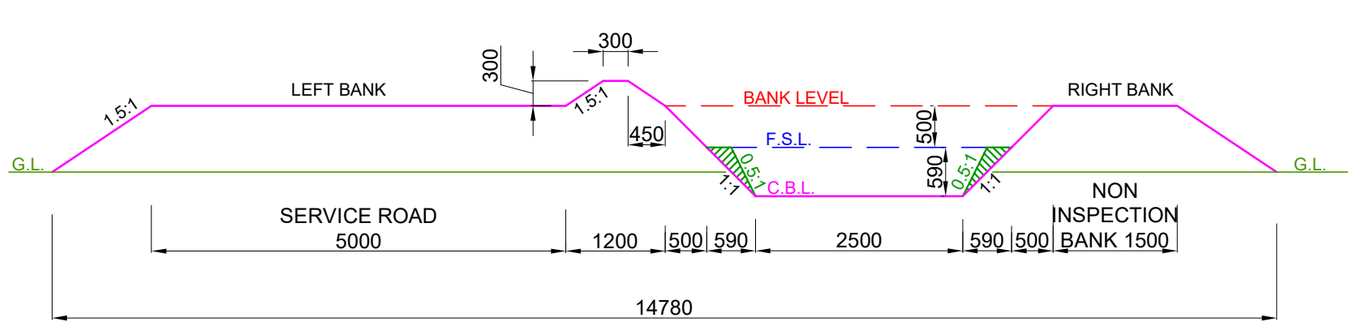
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ XSEC /TYP-(PCF) 2 of 8

TYPICAL X - SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 7.000 KM TO CH: 8.600 KM

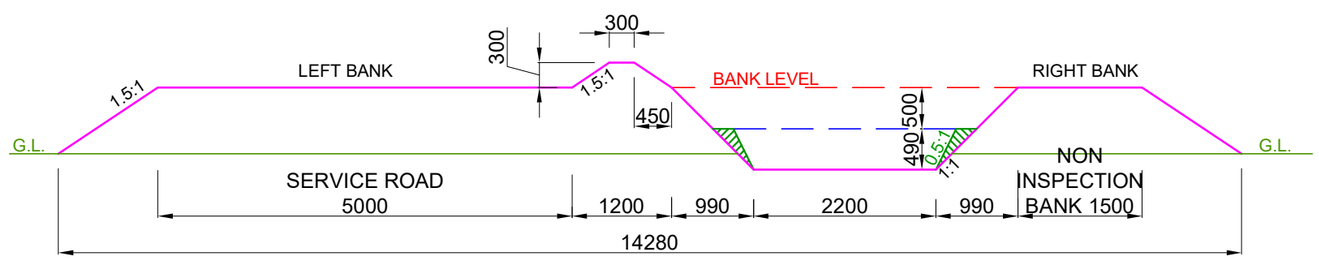
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
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3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ XSEC /TYP-(PCF) 3 of 8

TYPICAL X - SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 8.600 KM TO CH: 9.900 KM

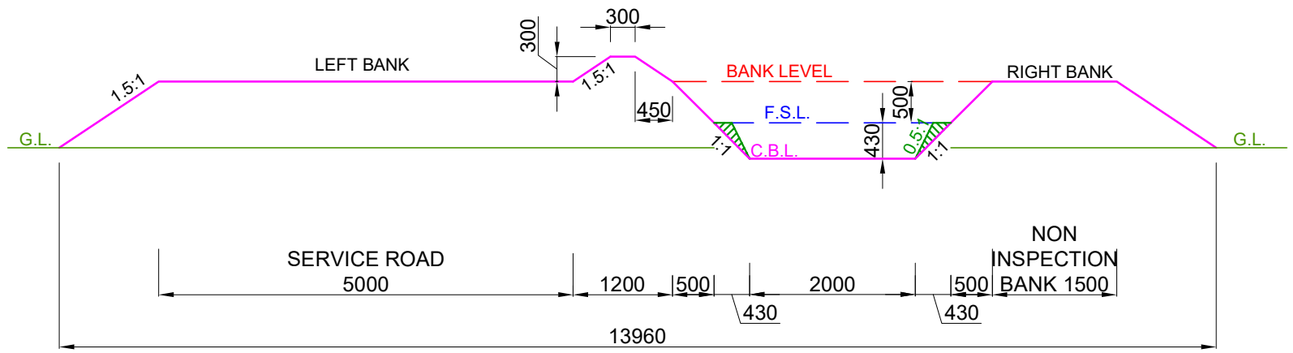
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
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3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ XSEC /TYP-(PCF) 4 of 8

TYPICAL X - SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 9.900 KM TO CH: 10.550 KM

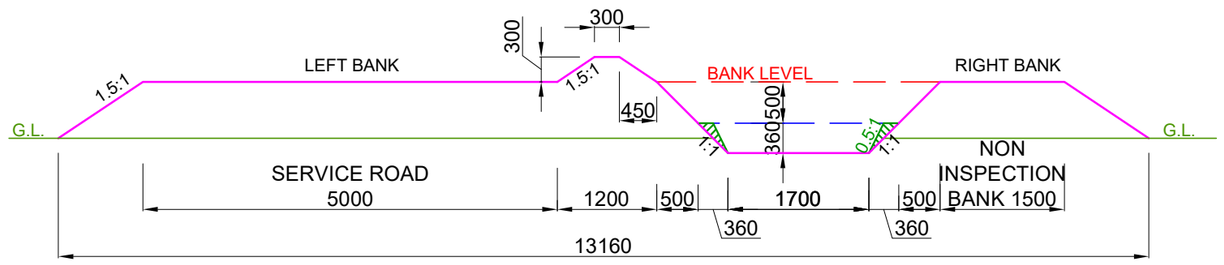
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ XSEC /TYP-(PCF) 5 of 8

TYPICAL X - SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 10.550 KM TO CH: 11.100 KM

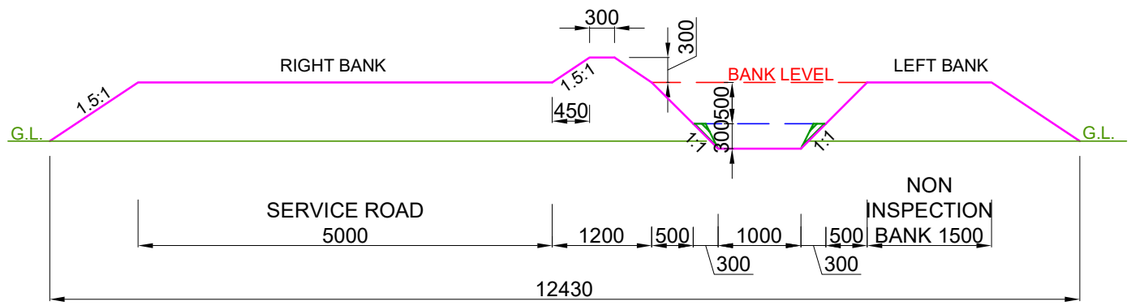
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
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3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ XSEC /TYP-(PCF) 6 of 8

TYPICAL X - SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 11.100 KM TO CH: 11.500 KM

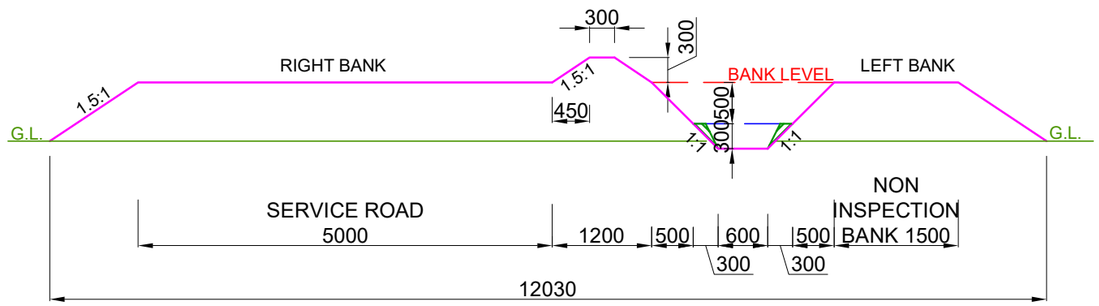
NOTE:-

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3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ XSEC /TYP-(PCF) 7 of 8

TYPICAL X - SECTION OF DHARAMPUR SUB DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 11.500 KM TO CH: 12.000 KM

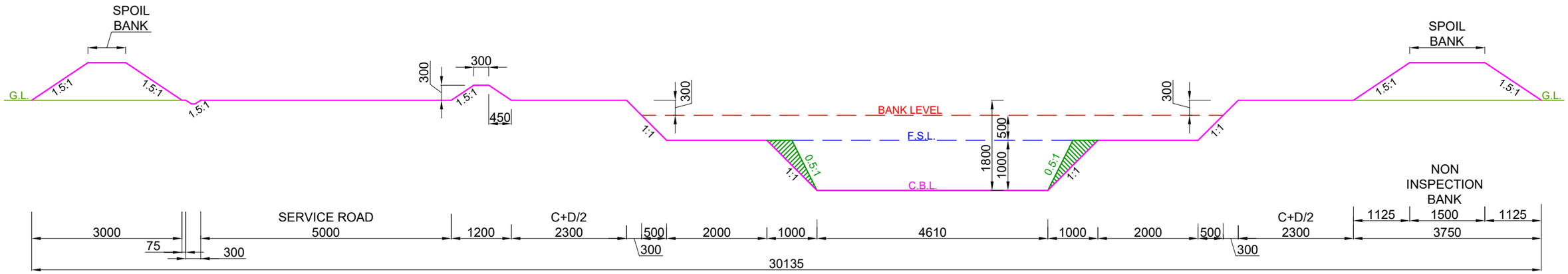
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
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3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF DHARAMPUR SUB DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-08/ XSEC /TYP-(PCF) 8 of 8

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 0.000 KM TO CH: 2.470 KM

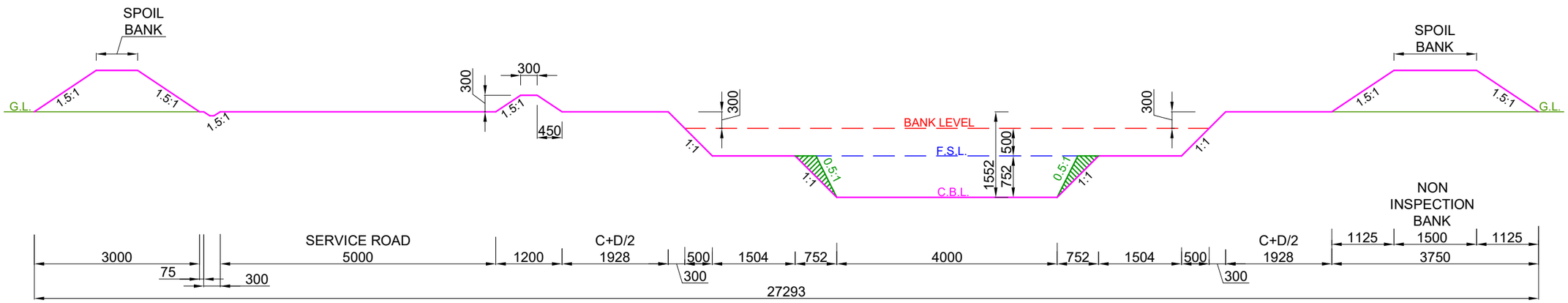
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FC) 1 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



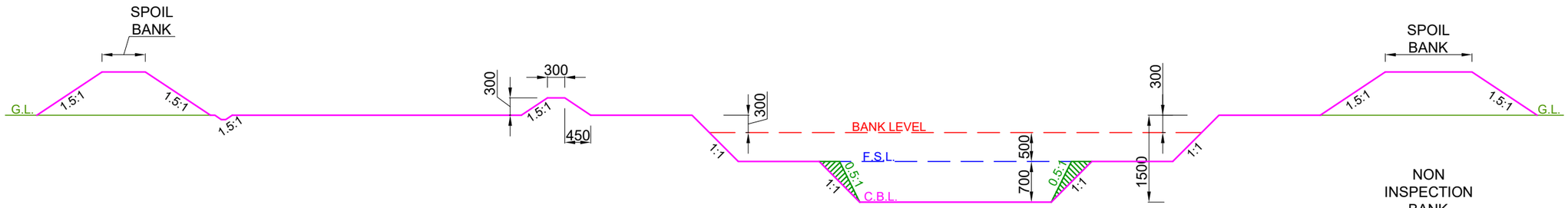
DESIGN SECTION FROM CH: 2.470 KM TO CH: 5.730 KM

NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FC) 2 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
DESIGN SECTION FOR FULL CUTTING



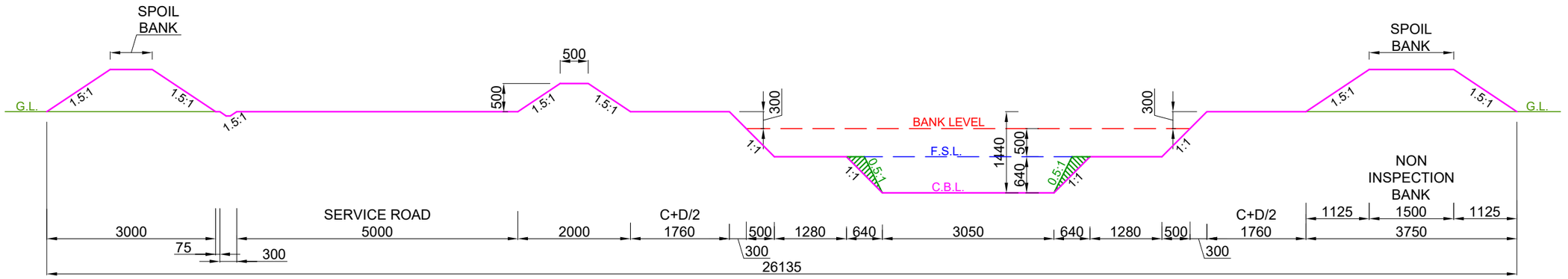
DESIGN SECTION FROM CH: 5.730 KM TO CH: 5.950 KM

NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FC) 3 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
DESIGN SECTION FOR FULL CUTTING



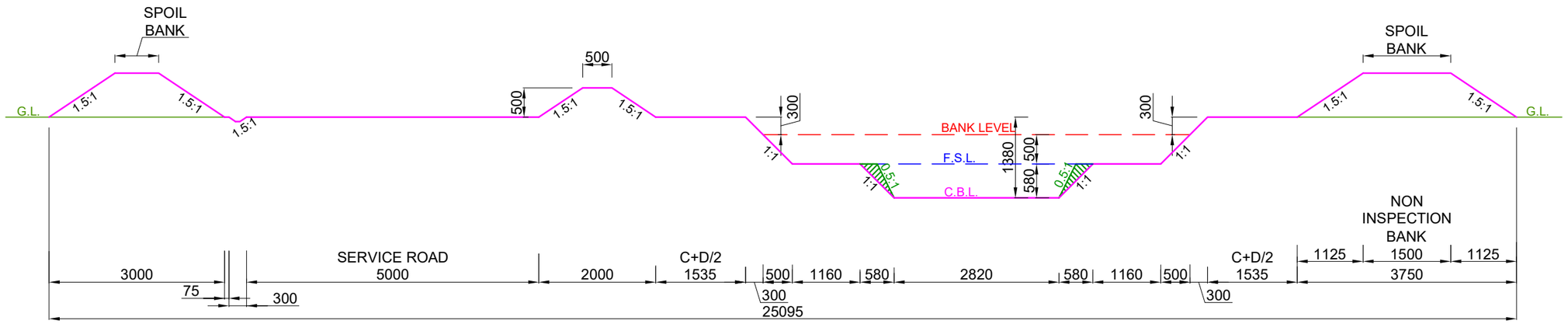
DESIGN SECTION FROM CH: 5.950 KM TO CH: 8.382 KM

NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FC) 4 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 8.382 KM TO CH: 10.250 KM

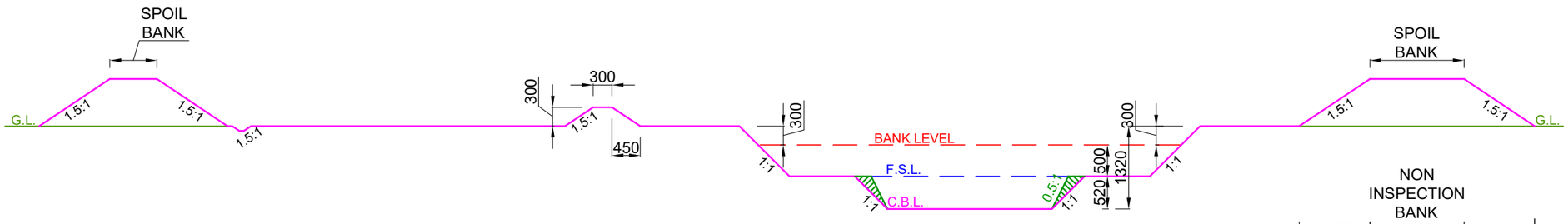
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FC) 5 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



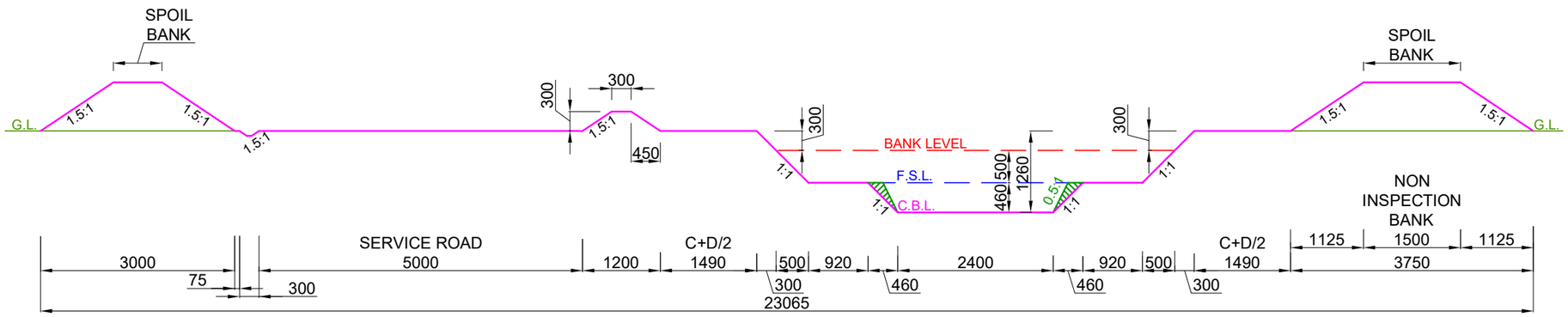
DESIGN SECTION FROM CH: 10.250 KM TO CH: 10.950 KM

NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FC) 6 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
DESIGN SECTION FOR FULL CUTTING



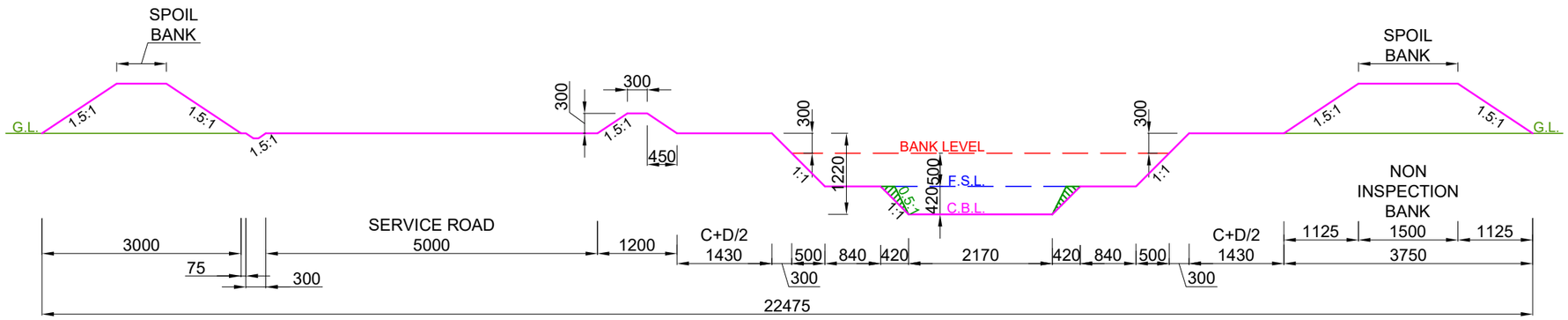
DESIGN SECTION FROM CH: 10.950 KM TO CH: 11.450 KM

NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FC) 7 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
DESIGN SECTION FOR FULL CUTTING



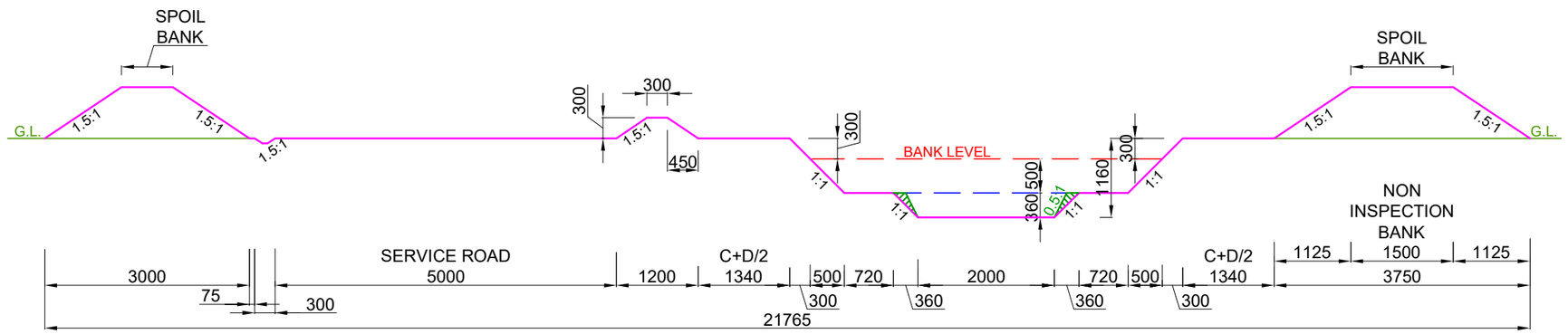
DESIGN SECTION FROM CH: 11.450 KM TO CH: 12.689 KM

NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
CUT AREA			Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
FILL AREA			Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FC) 8 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 11.689 KM TO CH: 12.954 KM

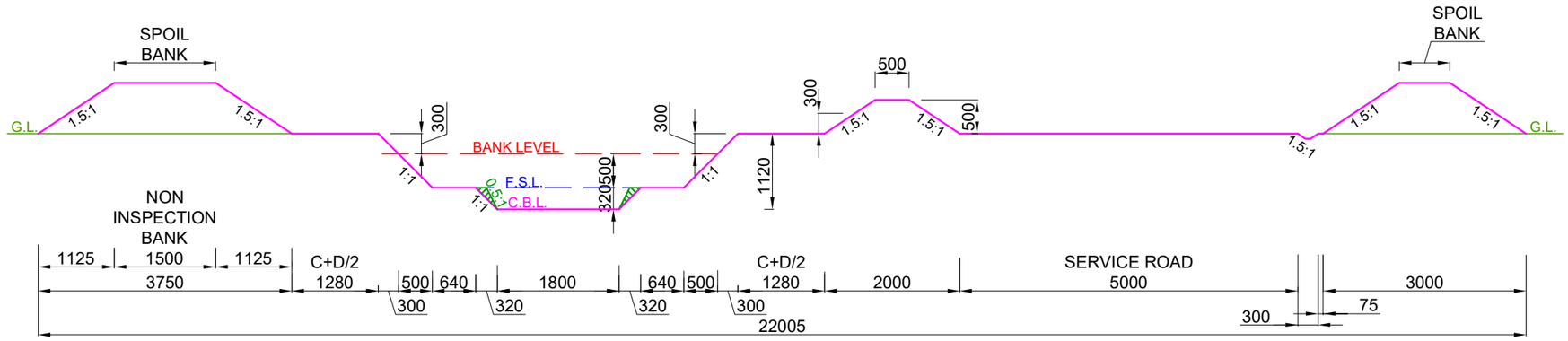
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FC) 9 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 12.954 KM TO CH: 14.100 KM

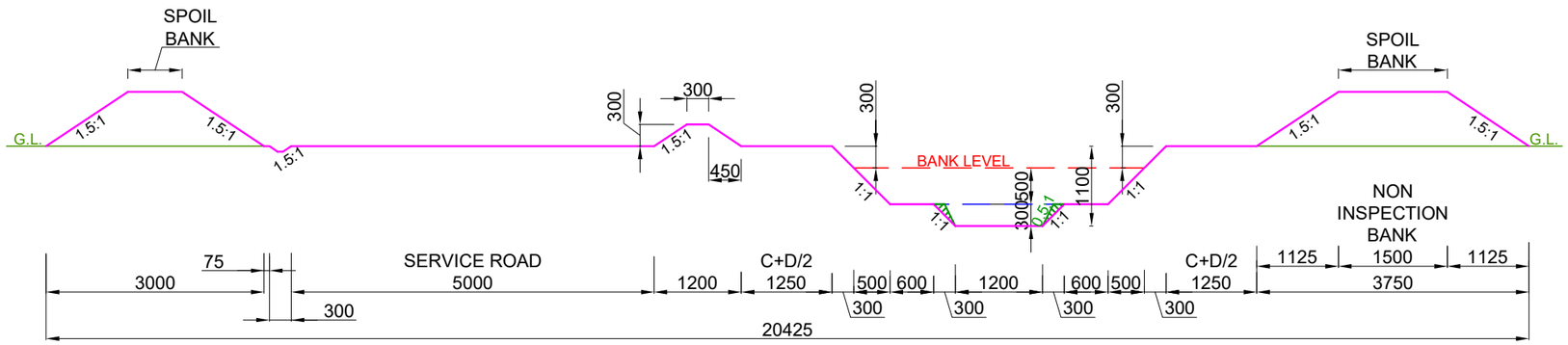
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FC) 10 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



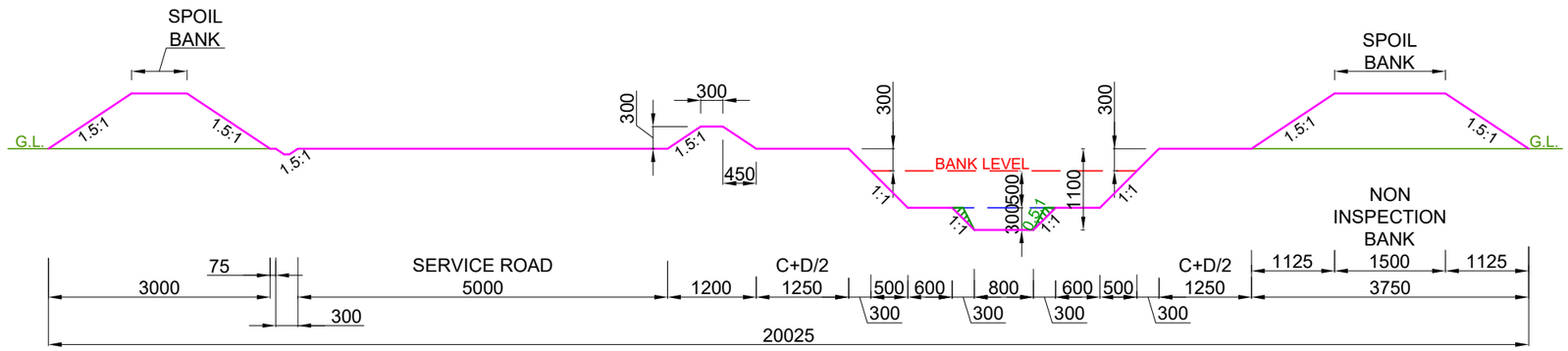
DESIGN SECTION FROM CH: 14.100 KM TO CH: 14.640 KM

NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FC) 11 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 14.640 KM TO CH: 14.850 KM

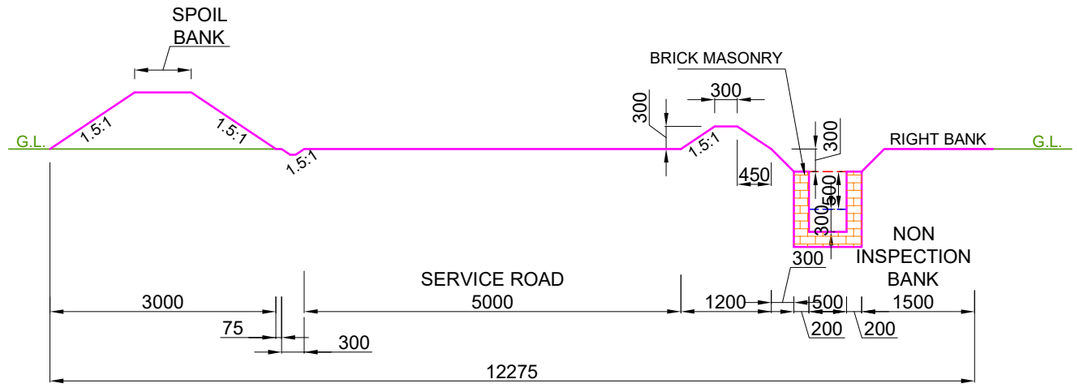
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FC) 12 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL CUTTING



DESIGN SECTION FROM CH: 14.850 KM TO CH: 15.422 KM

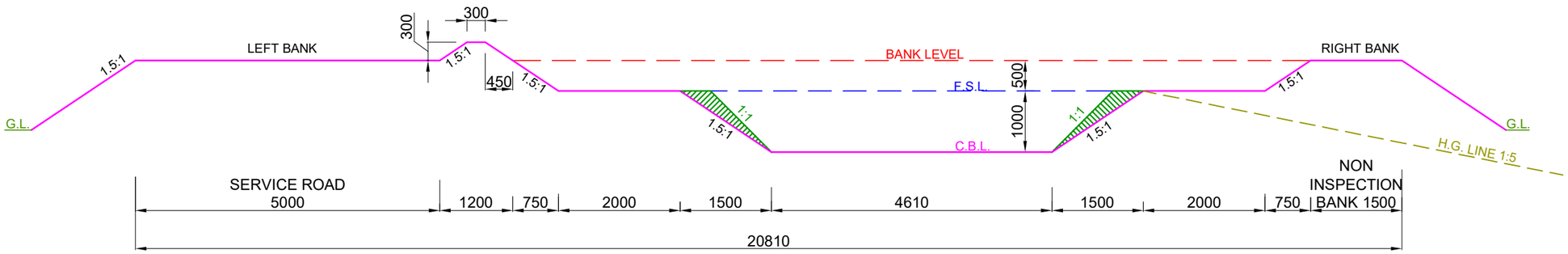
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FC) 13 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 0.000 KM TO CH: 2.470 KM

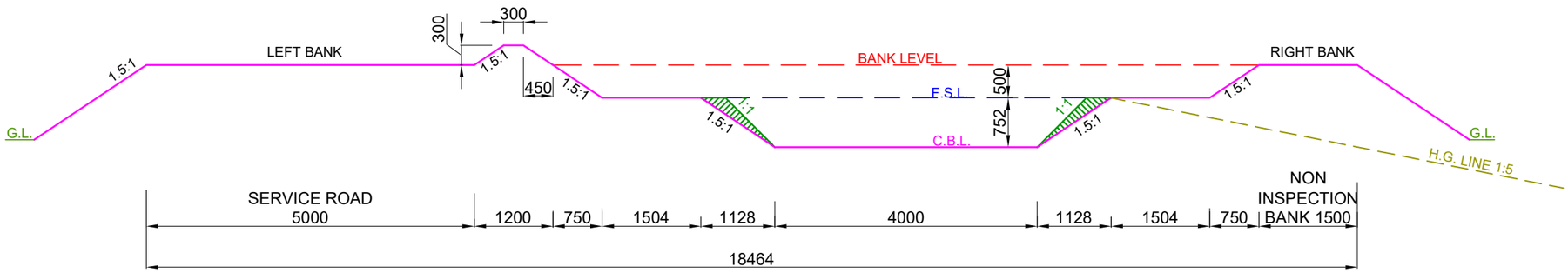
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FF)

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 2.470 KM TO CH: 5.730 KM

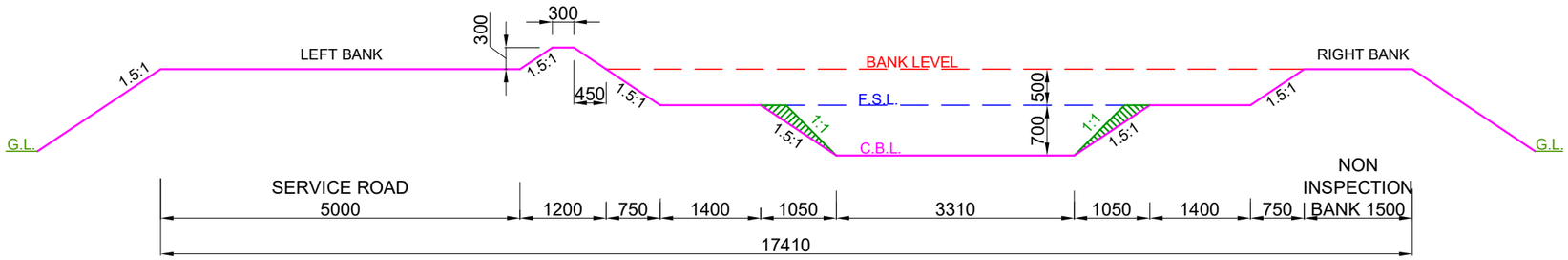
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FF)

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



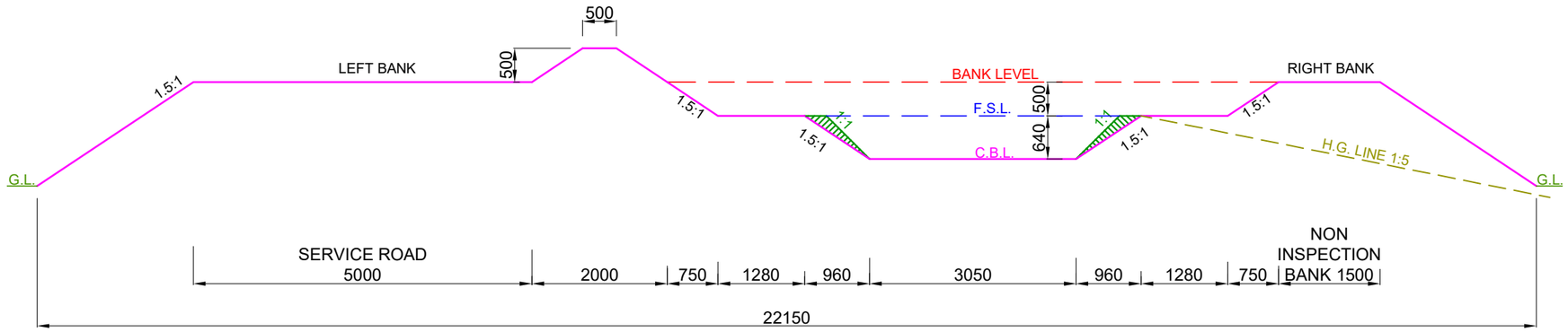
DESIGN SECTION FROM CH: 5.730 KM TO CH: 5.950 KM

NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FF)

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 5.950 KM TO CH: 8.382 KM

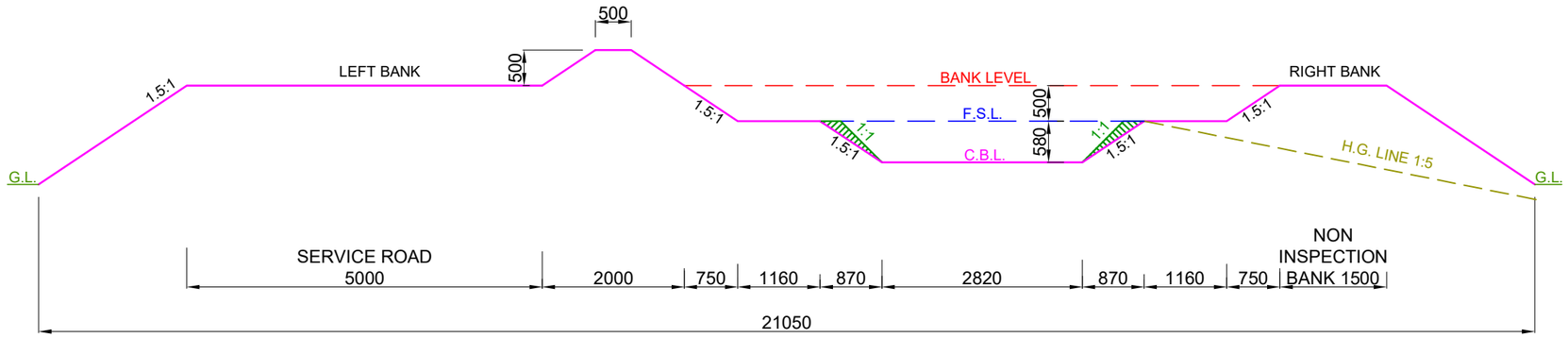
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FF) 4 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 8.382 KM TO CH: 10.250 KM

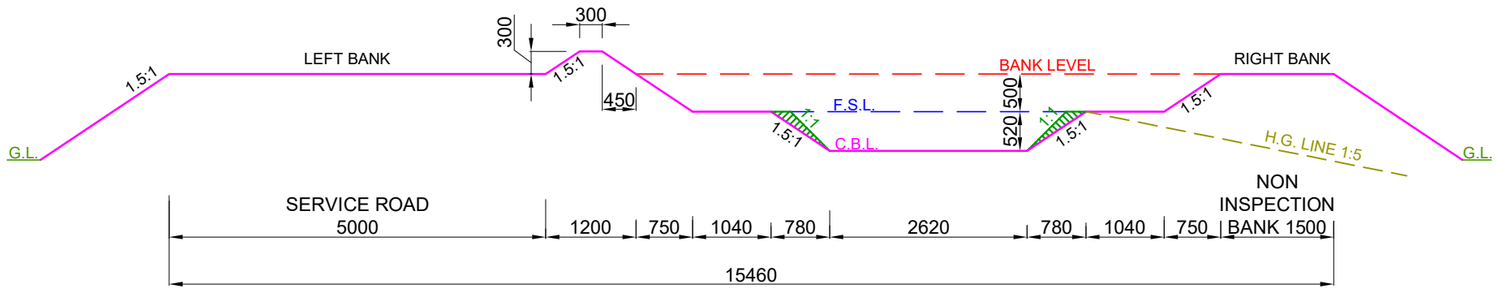
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FF)

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 10.250 KM TO CH: 10.950 KM

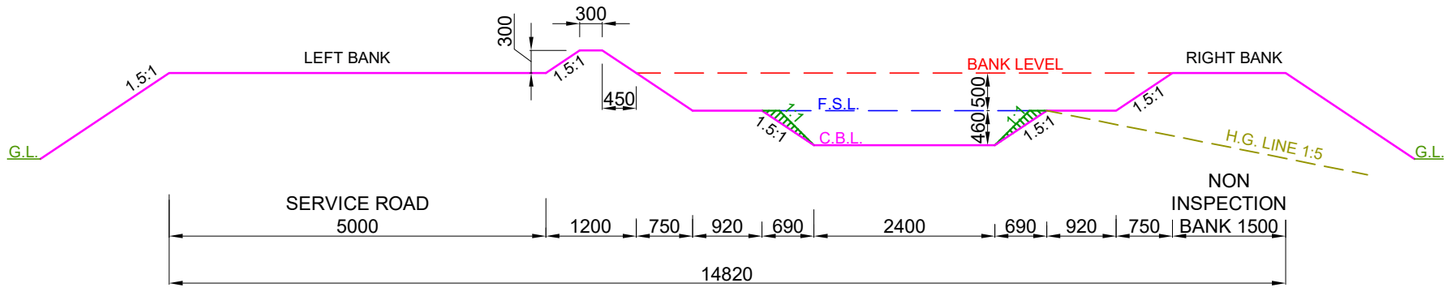
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FF)

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 10.950 KM TO CH: 11.450 KM

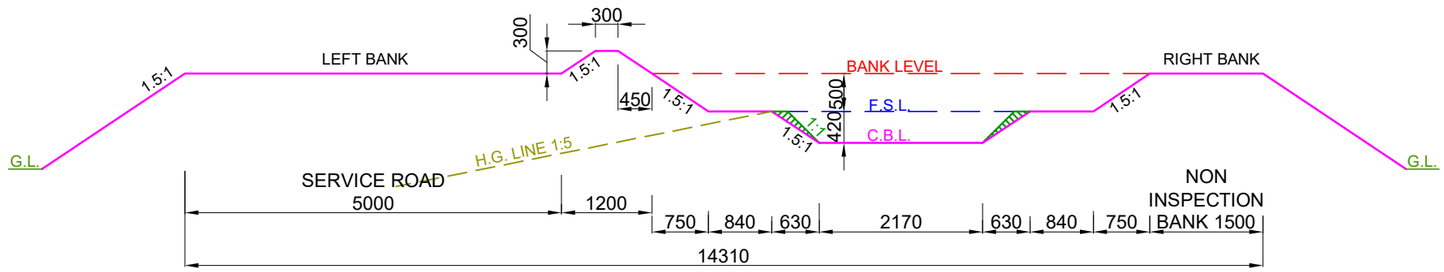
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FF)

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 11.450 KM TO CH: 12.689 KM

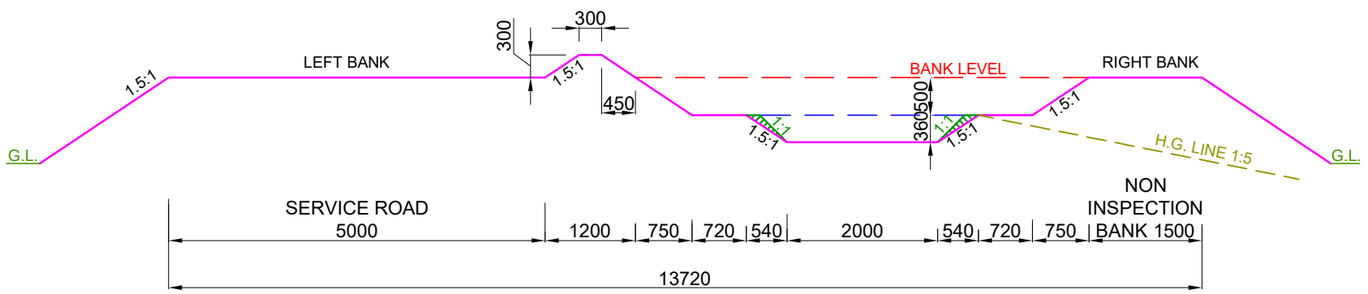
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FF)

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 11.689 KM TO CH: 12.954 KM

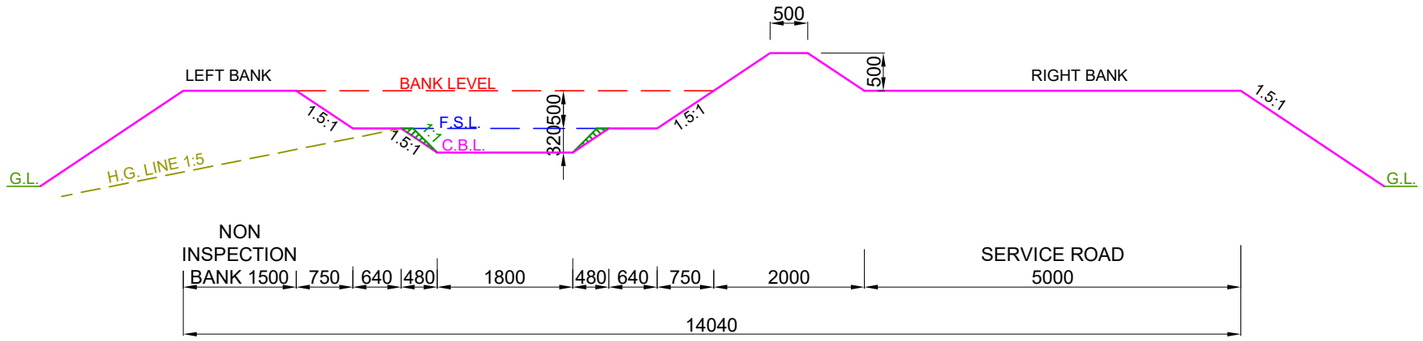
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FF)

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 12.954 KM TO CH: 14.100 KM

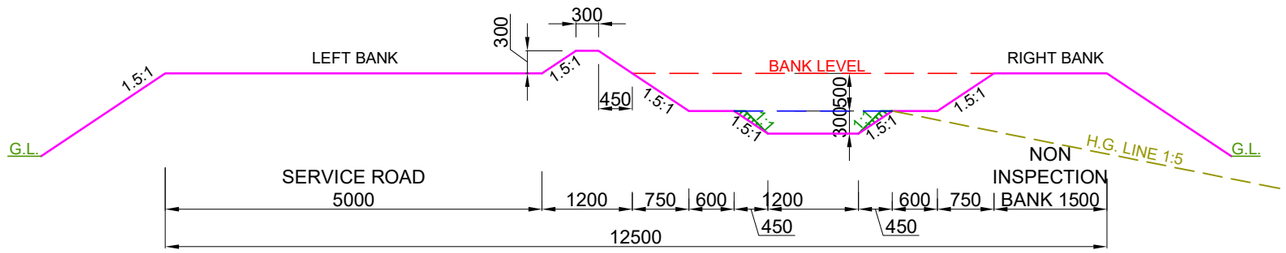
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FF)

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 14.100 KM TO CH: 14.640 KM

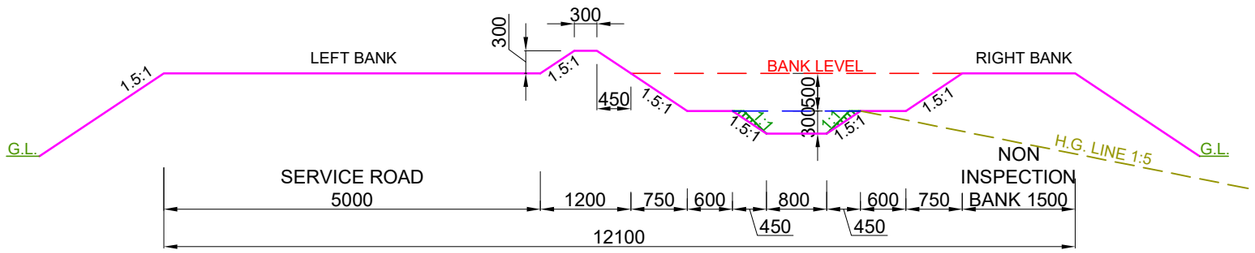
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FF) 11 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 14.640 KM TO CH: 14.850 KM

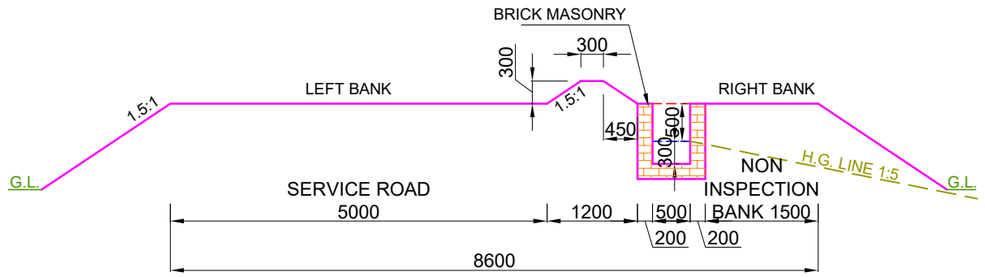
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FF)

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR FULL FILLING



DESIGN SECTION FROM CH: 14.850 KM TO CH: 15.422 KM

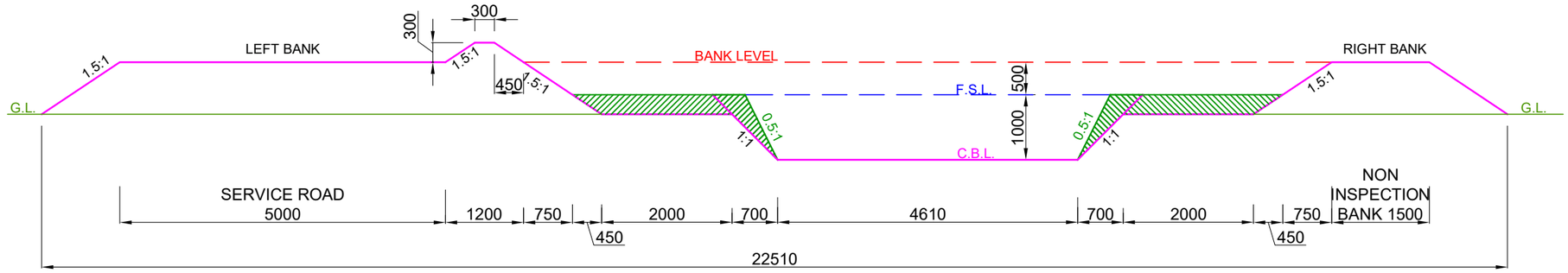
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(FF) 13 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 0.000 KM TO CH: 2.470 KM

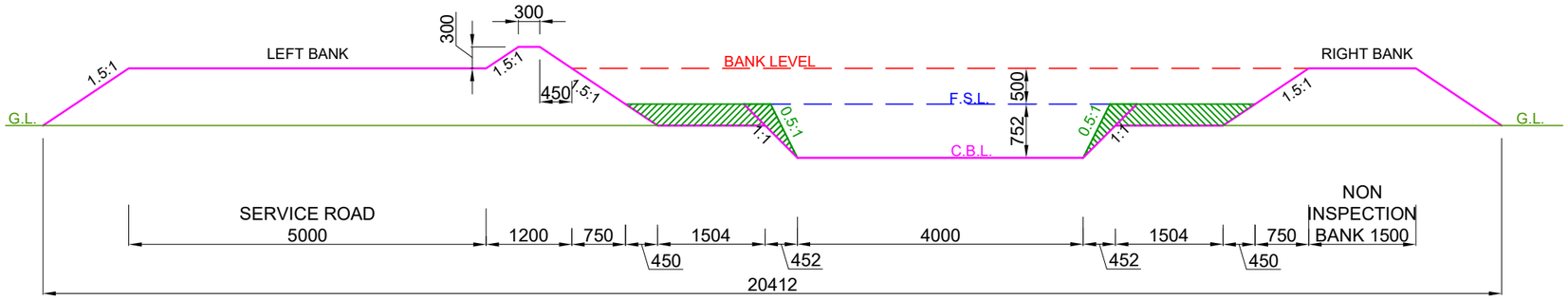
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(PCF) 1 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 2.470 KM TO CH: 5.730 KM

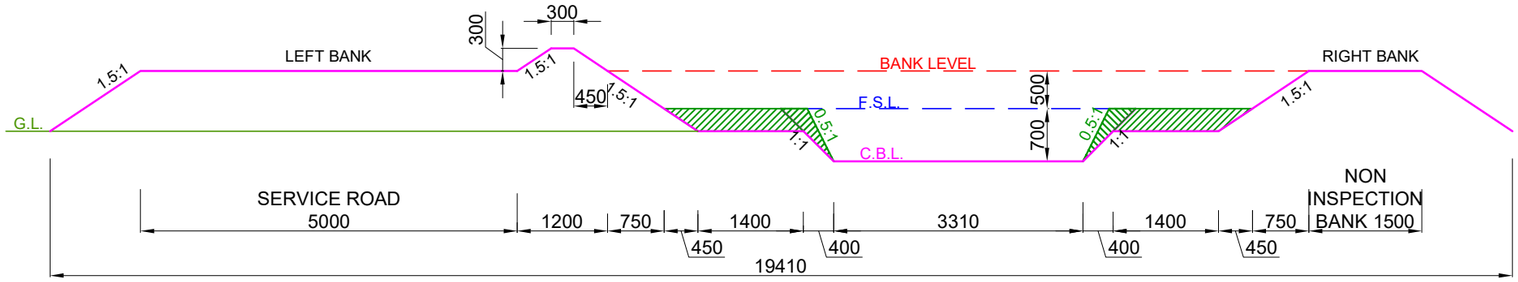
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(PCF) 2 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 5.730 KM TO CH: 5.950 KM

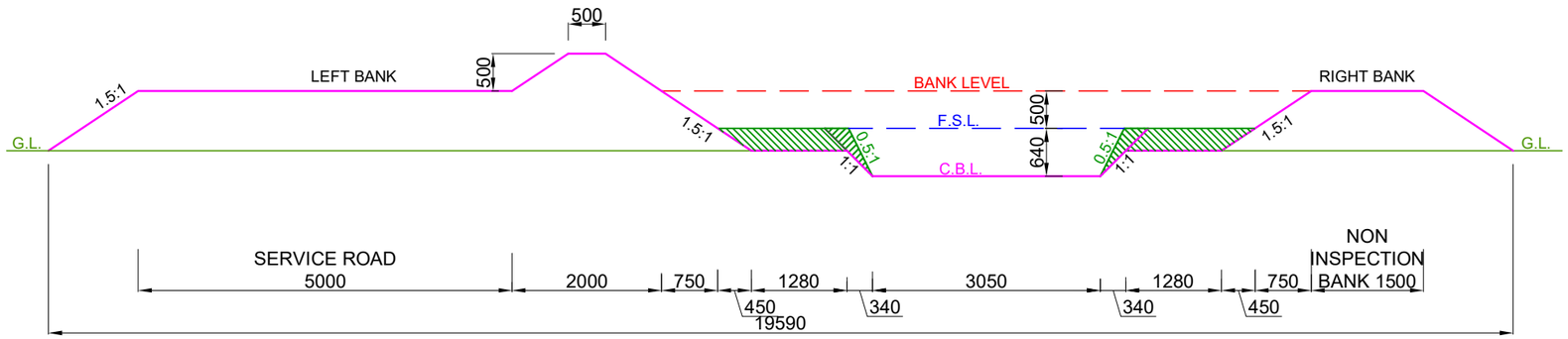
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(PCF) 3 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



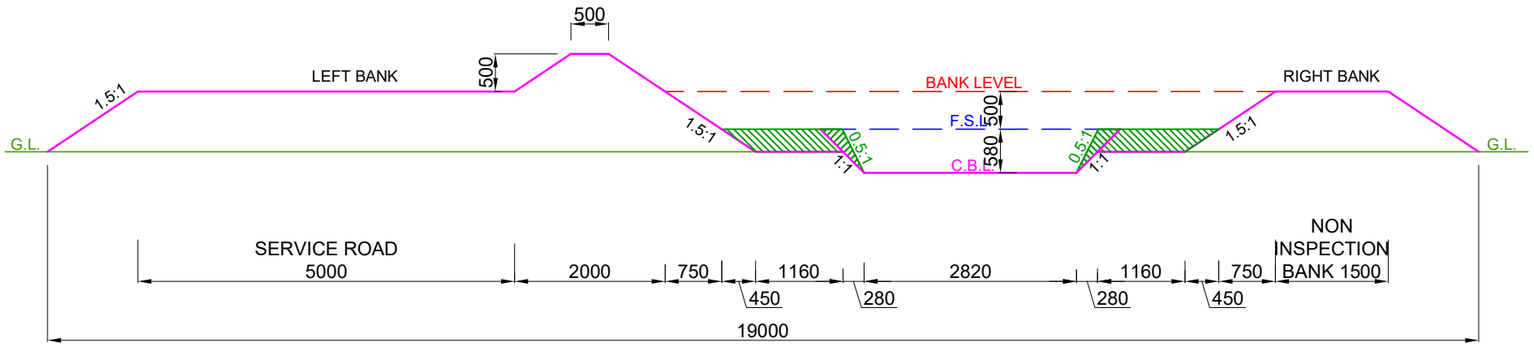
DESIGN SECTION FROM CH: 5.950 KM TO CH: 8.382 KM

NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(PCF) 4 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 8.382 KM TO CH: 10.250 KM

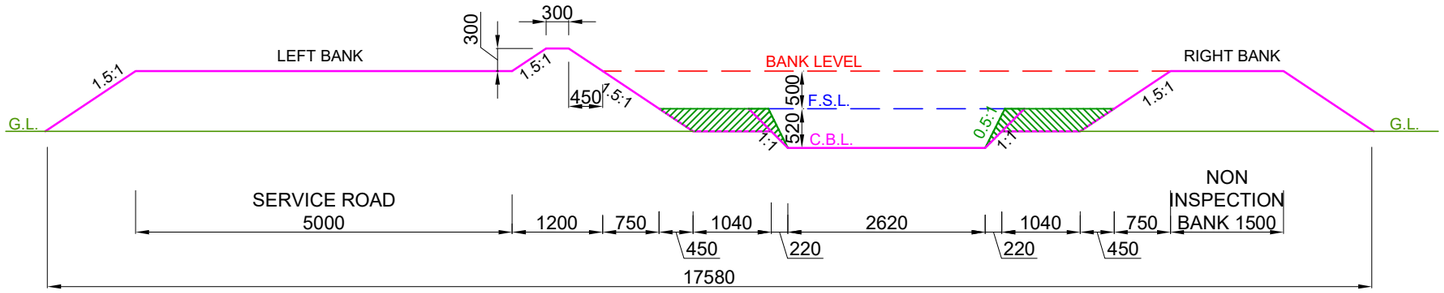
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(PCF) 5 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 10.250 KM TO CH: 10.950 KM

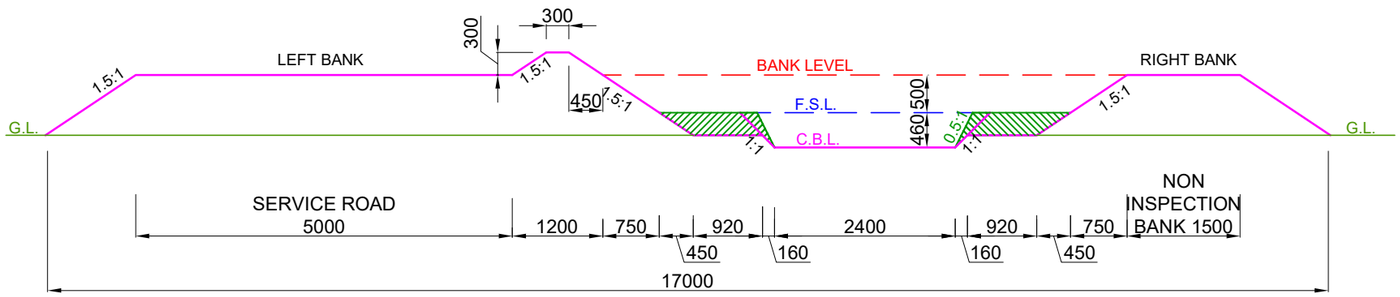
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(PCF) 6 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 10.950 KM TO CH: 11.450 KM

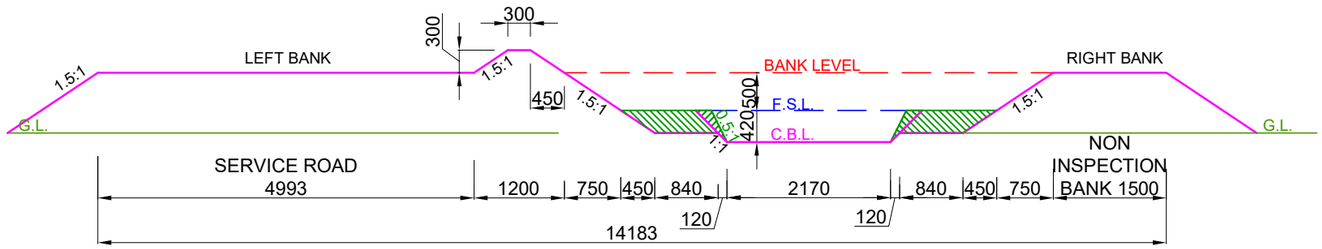
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(PCF) 7 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 11.450 KM TO CH: 12.689 KM

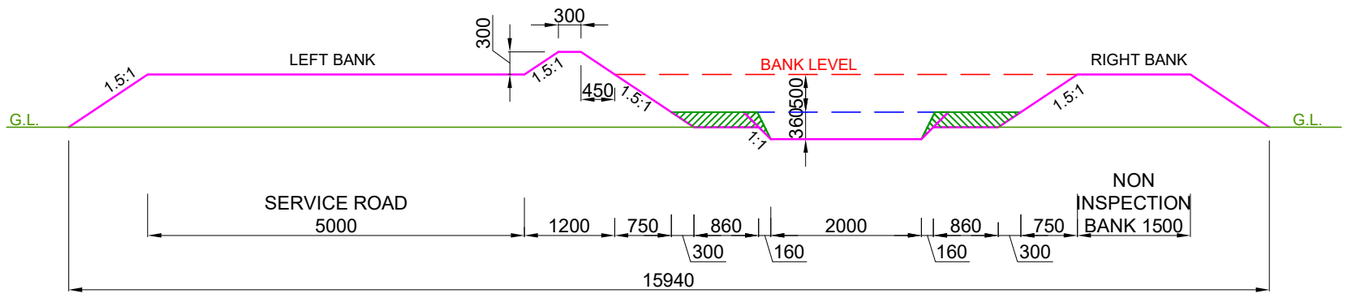
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(PCF) 8 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



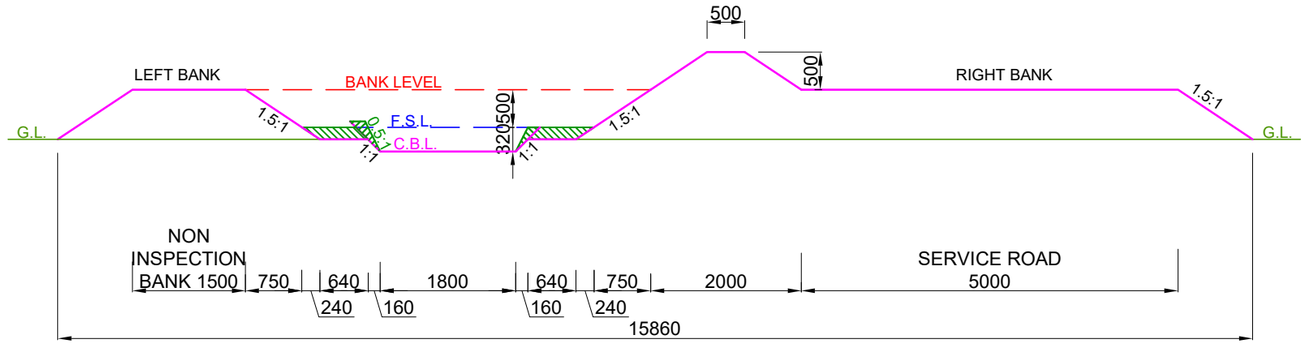
DESIGN SECTION FROM CH: 11.689 KM TO CH: 12.954 KM

NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :-		
	CUT AREA	WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(PCF) 9 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 12.954 KM TO CH: 14.100 KM

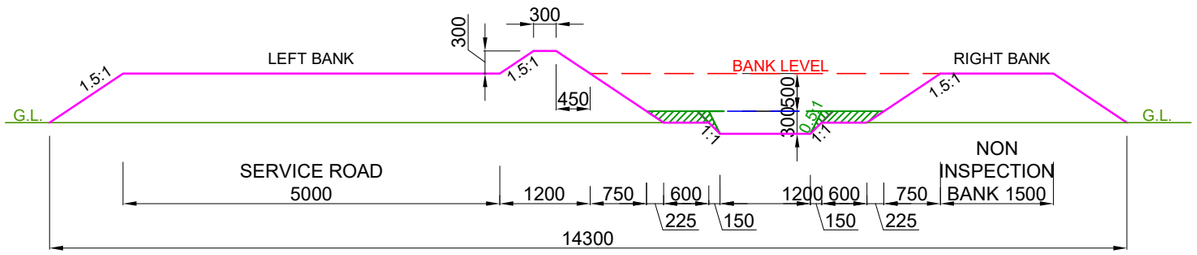
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(PCF) 10 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



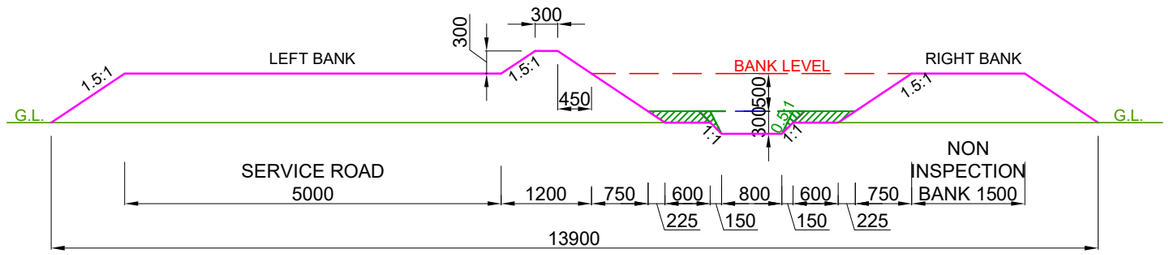
DESIGN SECTION FROM CH: 14.100 KM TO CH: 14.640 KM

NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(PCF) 11 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 14.640 KM TO CH: 14.850 KM

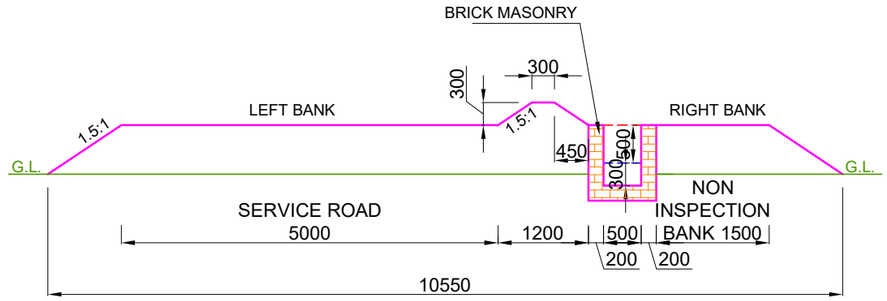
NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.	Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	CUT AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
	FILL AREA		Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(PCF) 12 of 13

TYPICAL X - SECTION OF PATOI DY.
(OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)

DESIGN SECTION FOR CUTTING/ PARTLY FILLING



DESIGN SECTION FROM CH: 14.850 KM TO CH: 15.422 KM

NOTE:-

1. THE BANK WIDTH HAS BEEN ADOPTED AS PER IS 7112 : 2002 (TABLE-1).
2. THE OFFTAKING CHAINAGE AND LENGTH OF THE CANAL HAS BEEN TAKEN AS PER ACTUAL SURVEY.
3. THIS IS A TYPICAL DRAWING , INSPECTION & NON-INSPECTION BANK SHALL BE TAKEN AS PER SITE CONDITIONS.

LEGEND		Prepared by :- WAPCOS LTD.		
	CUT AREA		Project Title :-	NORTH KOEL RESERVOIR PROJECT, BIHAR AND JHARKHAND
	FILL AREA		Drawing Title :-	X - SECTION OF PATOI DY. (OFFTAKE FROM RD - 19+980 KM., ANGRA BRANCH CANAL)
			Drawing No. :-	WAP/ INFRA/ NORTHKOEL/ BC/ R-37-09/ XSEC /TYP-(PCF) 13 of 13